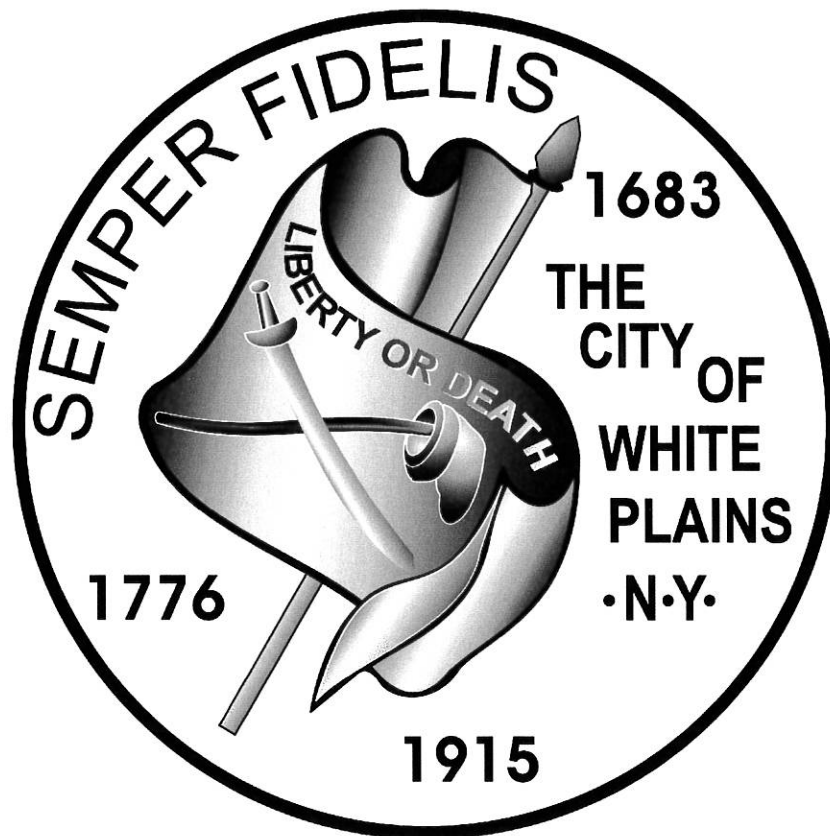


# Standard Construction Details



Department of Public Works  
City of White Plains, New York

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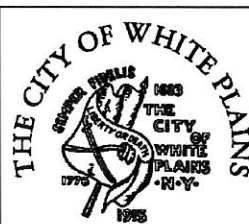
## STANDARD CONSTRUCTION DETAILS

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Note: The following pages have been intentionally omitted:  
SD2, SD4, SD7, SD8, SD12, SD14, SD16, SD18,  
SD19, and SD20.

## GENERAL NOTES

1. In general, and unless otherwise specified, all materials and methods of construction shall conform to Section II and Section III of the contract specifications entitled "Materials of Construction" and "Construction Methods and Payment Items", respectively. The specifications set forth herein shall be followed in all cases except where the contract plans indicate otherwise, in which case the plans shall govern. Special structures will conform with the specifications set forth herein, and with the dimensions shown on the plans, or as otherwise specified.
2. Where masonry structures are constructed, the first course of masonry shall be imbedded in the concrete base immediately after the base has been poured.
3. Unless otherwise specified, the contractor shall have the option to build masonry structures of either brick or solid concrete block and, where specified precast concrete. All brick and block will be laid in 1:2 portland cement mortar.
4. Unless otherwise specified all concrete footings or bases shall be of Class "A" concrete and all concrete for structures with exposed surfaces shall be air entrained.
5. Invert channels will be brick or split pipe, as directed by the engineer. Brick inverts will be painted with three (3) coats of neat cement grout without sand, or plastered with one coat of 1:2 cement mortar, if ordered by the Engineer.
6. Exterior surfaces of walls of masonry structures will be plastered with a 1" coat of 1:2 cement mortar. Interior surfaces of wall will be coated with three (3) coats of neat cement grout without sand, applied with an interval of not less than twenty four (24) hours between applications. In addition, the exterior surfaces of walls of sanitary sewer manholes will be waterproofed by brushing on two (2) coats of bituminous material equal to "Sika-Seal", as manufactured by the Sika Chemical Corporation. The application shall be done according to the manufacturer's directions.
7. Where letters are specified on cast iron covers, they shall be cast on top approximately 2" square and the surfaces of the letters shall be level with the surface of the toe-cope pattern.
8. All Exposed structural steel will be painted with hot coal tar or asphalt pitch (at least 300°) or two coats of asphaltic paint "Cabot's Flexiblac" or equal, over one coat of red lead.
9. The cast iron steps used i all structures shall be spaced 15" on center vertically and staggered 12" on center with a 6" minimum projection.
10. Unless otherwise specified all structures will have a base 6" of compacted sand or 3/4" crushed stone above undisturbed material.
11. All concrete will be Class "A" unless otherwise specified.



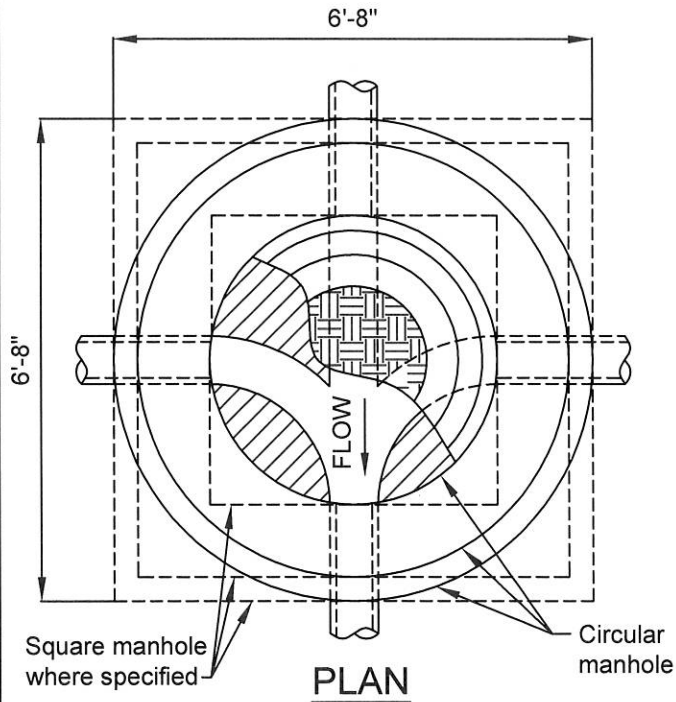
City of White Plains, N.Y.  
Bureau of Engineering

Standard Construction Detail

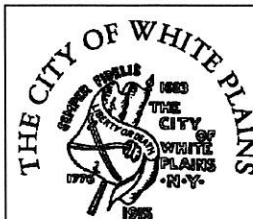
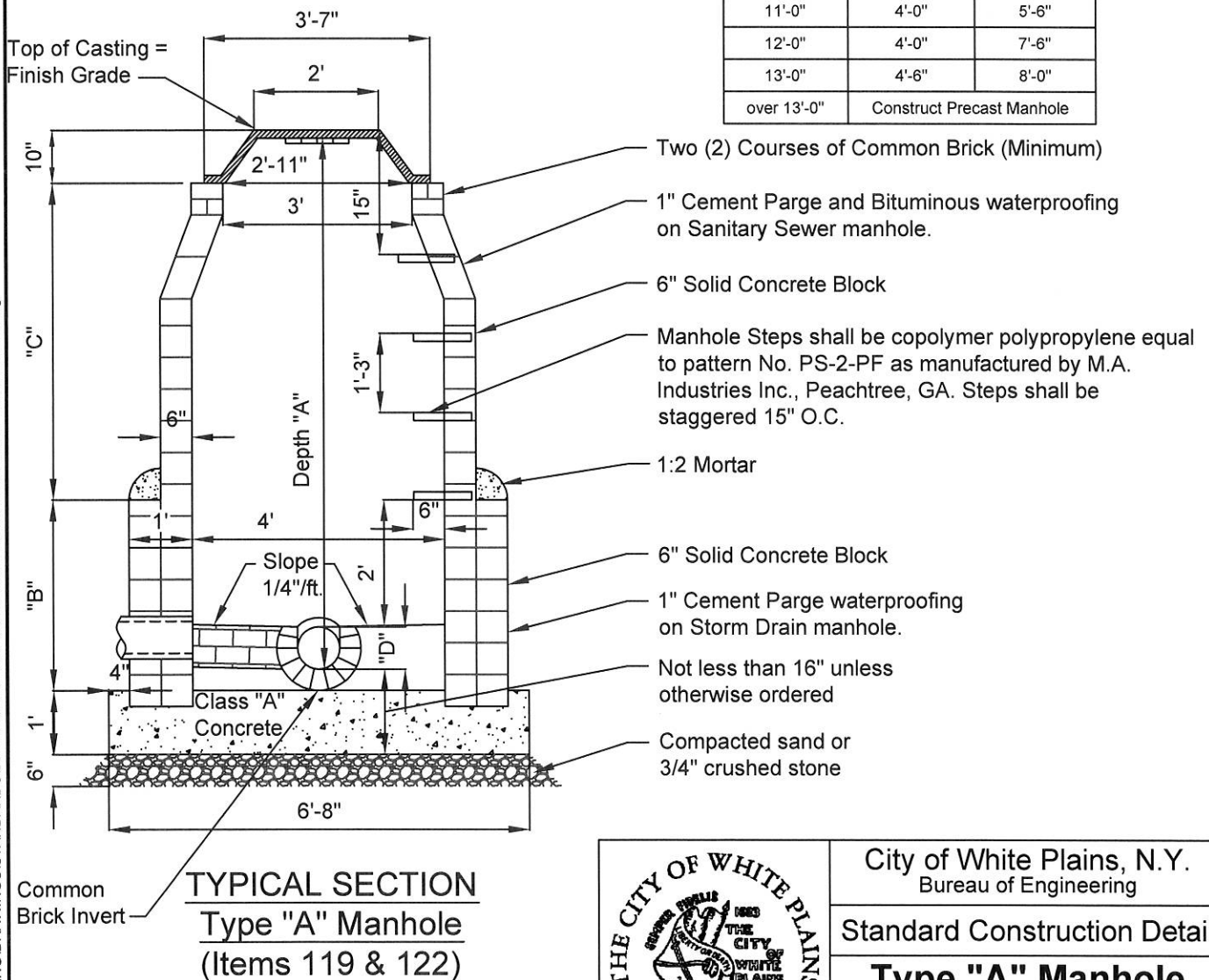
**General Notes**

## NOTES

1. Unless otherwise specified Sanitary Sewer manholes shall have letters "SEWER" and Storm Drain manholes shall have letters "DRAIN" cast on the covers.
2. Where pipe diameters are greater than 36", construct Type "C" manhole.
3. When depth "A" is greater than 10'-0", the additional depth over 10'-0" shall be paid for under Item 122.
4. Casting and cover shall be equal to Pattern No. 1204 as manufactured by the Campbell Foundry Co., Harrison, N.J.
5. Cover for sanitary sewer manholes shall be Campbell, "Flow-Seal" type, with a 3/4" threaded hole located adjacent to the pick hole, 4" from the edge of cover.



| MANHOLE DIMENSIONS                       |                              |                             |
|--|------------------------------|-----------------------------|
| Depth "A"<br>Top of Casting<br>To Invert | "B"<br>Height of<br>12" Wall | "C"<br>Height of<br>6" Wall |
| 6'-0"                                    | 2'-6"                        | 3'-0"                       |
| 7'-0"                                    | 3'-0"                        | 3'-6"                       |
| 8'-0"                                    | 3'-6"                        | 4'-0"                       |
| 9'-0"                                    | 3'-6"                        | 5'-0"                       |
| 10'-0"                                   | 4'-0"                        | 5'-6"                       |
| 11'-0"                                   | 4'-0"                        | 5'-6"                       |
| 12'-0"                                   | 4'-0"                        | 7'-6"                       |
| 13'-0"                                   | 4'-6"                        | 8'-0"                       |
| over 13'-0"                              | Construct Precast Manhole    |                             |



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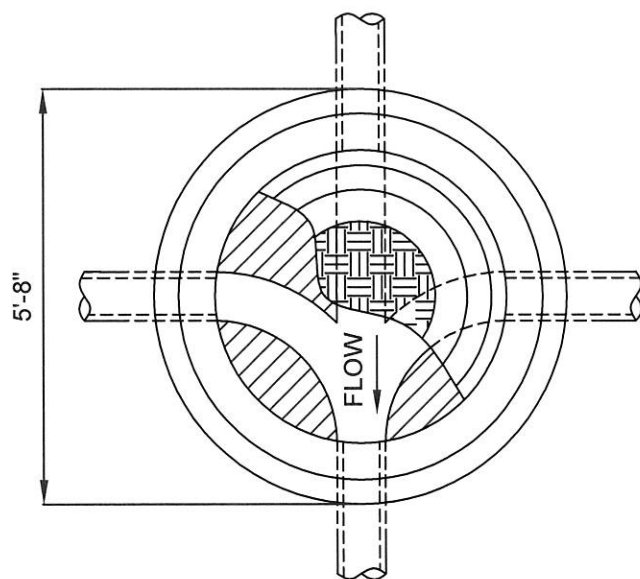
Standard Construction Detail

**Type "A" Manhole**  
**(Concrete Block)**

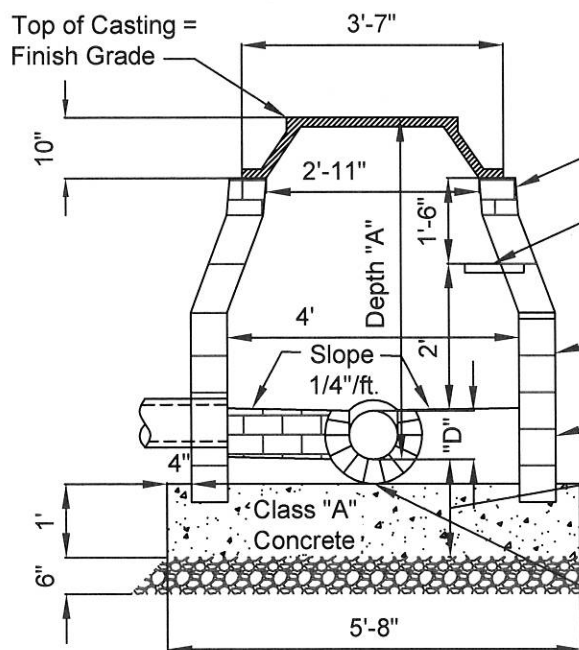


## NOTES

1. Type "B" Manhole shall be used where depth "A" is 5'-0" or less.
2. Unless otherwise specified Sanitary Sewer manholes shall have letters "SEWER" and Storm Drain manholes shall have letters "DRAIN" cast on the covers.
3. Casting and cover shall be equal to Pattern No. 1204 as manufactured by the Campbell Foundry Co., Harrison, N.J.
4. Cover for sanitary sewer manholes shall be Campbell, "Flow-Seal" type, with a 3/4" threaded hole located adjacent to the pick hole, 4" from the edge of cover.



PLAN



Two (2) Courses of Common Brick (Minimum)

Manhole Steps shall be copolymer polypropylene equal to pattern No. PS-2-PF as manufactured by M.A. Industries Inc., Peachtree, GA. Steps shall be staggered 15" O.C.

1" Cement Parge and Bituminous waterproofing on Sanitary Sewer manhole and Storm Drain.

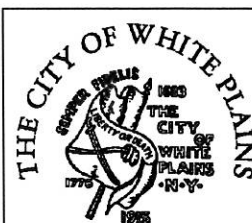
6" Solid Concrete Block

Not less than 16" unless otherwise ordered

Compacted sand or 3/4" crushed stone

Common Brick Invert

**TYPICAL SECTION**  
**Type "B" Manhole**  
 (Item 120)



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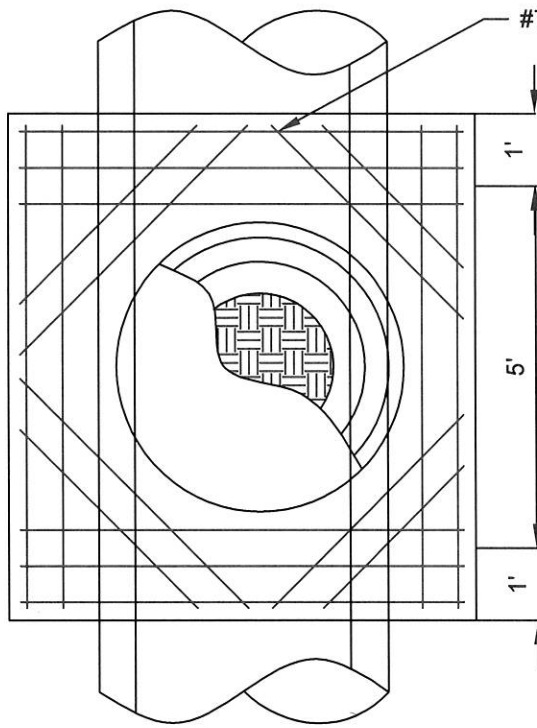
Standard Construction Detail

**Type "B" Manhole**  
**(Concrete Block)**

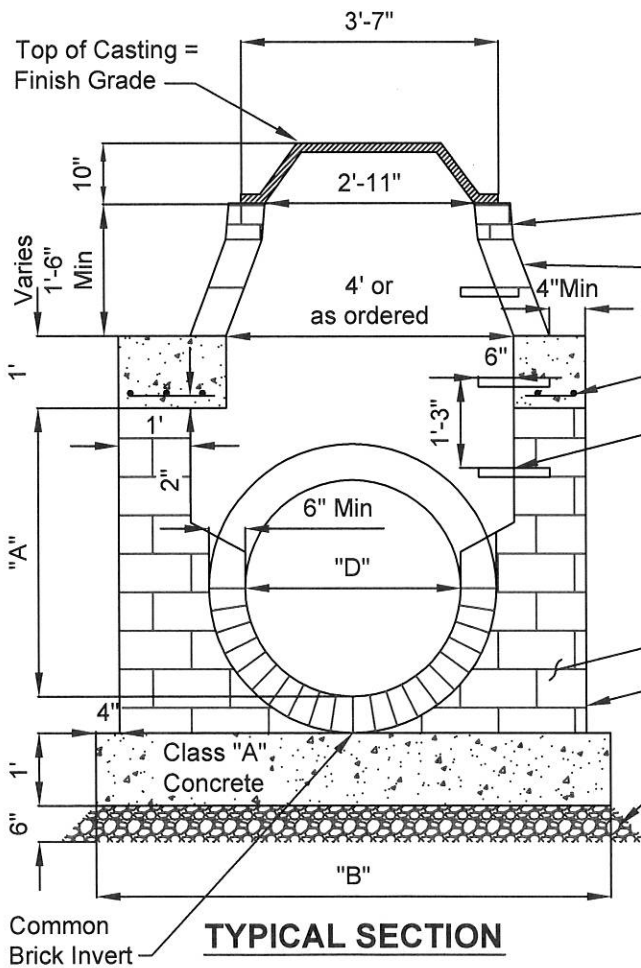
## NOTES

1. Where pipes are smaller than 42" diameter, use Type "A" or Type "B" manhole.
2. Unless otherwise specified Sanitary Sewer manholes shall have letters "SEWER" and Storm Drain manholes shall have letters "DRAIN" cast on the covers.
3. Casting and cover shall be equal to Pattern No.1204 as manufactured by the Campbell Foundry Co., Harrison, N.J.
4. Cover for sanitary sewer manholes shall be Campbell, "Flow-Seal" type, with a 3/4" threaded hole located adjacent to the pick hole, 4" from the edge of cover.

| MANHOLE DIMENSIONS |       |        |             |
|--------------------|-------|--------|-------------|
| "D" Pipe Diameter  | "A"   | "B"    | ITEM Number |
| 42"                | 4'-0" | 7'-2"  | 121A        |
| 48"                | 4'-6" | 7'-8"  | 121B        |
| 54"                | 5'-0" | 8'-2"  | 121C        |
| 60"                | 5'-6" | 8'-8"  | 121D        |
| 66"                | 6'-1" | 9'-3"  | 121E        |
| 72"                | 6'-7" | 9'-10" | 121F        |
| 78"                | 7'-2" | 10'-5" | 121G        |
| 84"                | 7'-8" | 11'-0" | 121H        |
| 90"                | 8'-2" | 11'-7" | 121I        |
| 96"                | 8'-9" | 12'-2" | 121J        |



PLAN



TYPICAL SECTION

**Type "C" Manhole**  
(Item 121)

Two (2) Courses of Common Brick (Minimum)

8" Brick or 6" Solid Concrete Radial Block

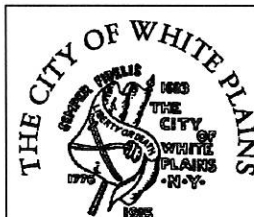
#7 bars 6" O.C. both ways

Manhole Steps shall be cast iron equal to pattern No.2588-1 as manufactured by the Campbell Foundry Co., Harrison, N.J., or copolymer polypropylene equal to pattern No. PS-2-PF-S as manufactured by M.A. Industries Inc., Peachtree, GA. Steps shall be staggered 15" O.C.

Solid concrete block

1" Cement Parge Waterproofing

Compacted sand or  
3/4" crushed stone



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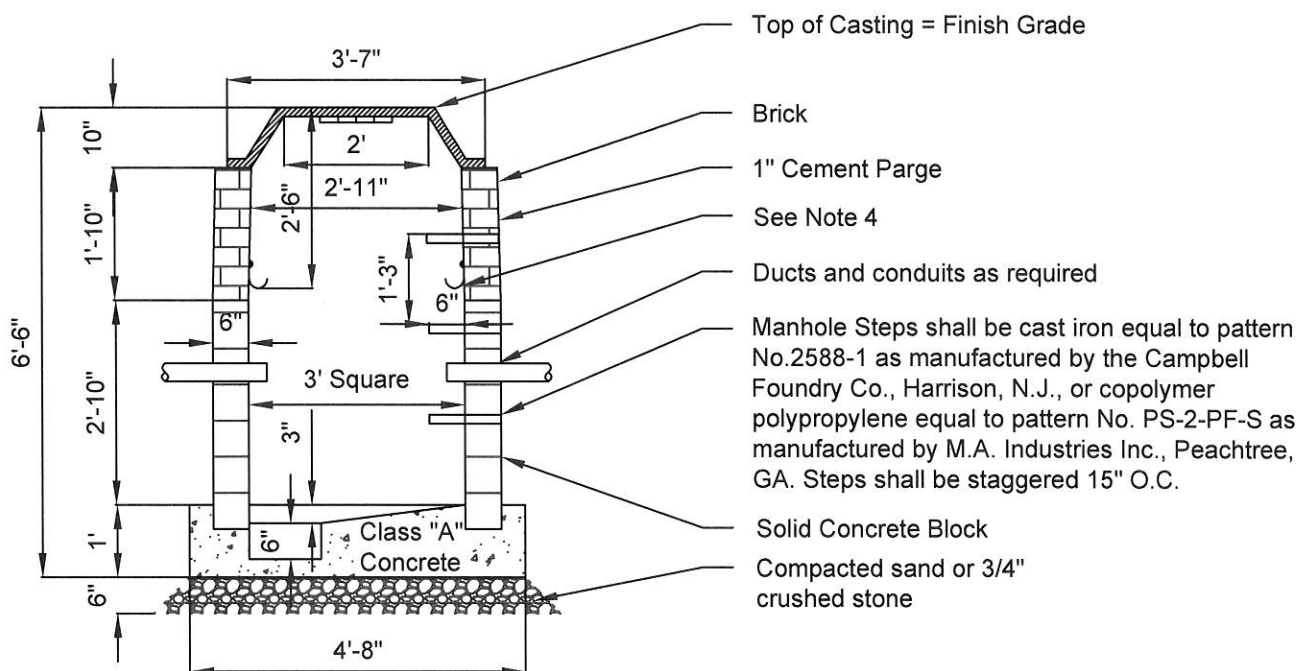
Standard Construction Detail

**Type "C" Manhole**

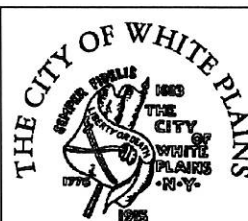
Diagram illustrating the layout of a 12" diameter sump within a 4'-8" square frame. The sump is shown as a circular area with a hatched pattern, centered within the square frame. The frame dimensions are labeled as 4'-8" on both the top and left sides. A dashed line indicates the 12" diameter of the sump. A label "12" diameter Sump" points to the circular area.

1. Unless otherwise specified traffic control manholes shall have letters "TRAFFIC" and fire alarm covers shall have letters "WFPD" cast on the covers. The cover will have no vent holes.
2. Minimum cover over duct will be 2'-6"
3. All exposed ducts and conduits shall project 3" beyond the wall. Ducts shall be plugged and conduits shall be threaded and capped with an approved bushing.
4. A wire support hanger shall be installed 2'-6" below finish grade, (four (4) required per manhole). Hangers shall be similar to catalog number C-149, as manufactured by Steel City or approved equal.
5. Casting and cover shall be equal to Pattern No.1204 as manufactured by the Campbell Foundry Co., Harrison, N.J.

## PLAN



TYPICAL SECTION  
Type "F" Manhole  
(Item 150)

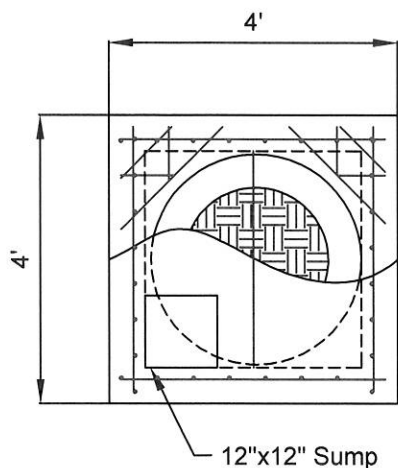


City of White Plains, N.Y.  
Bureau of Engineering

### Standard Construction Detail

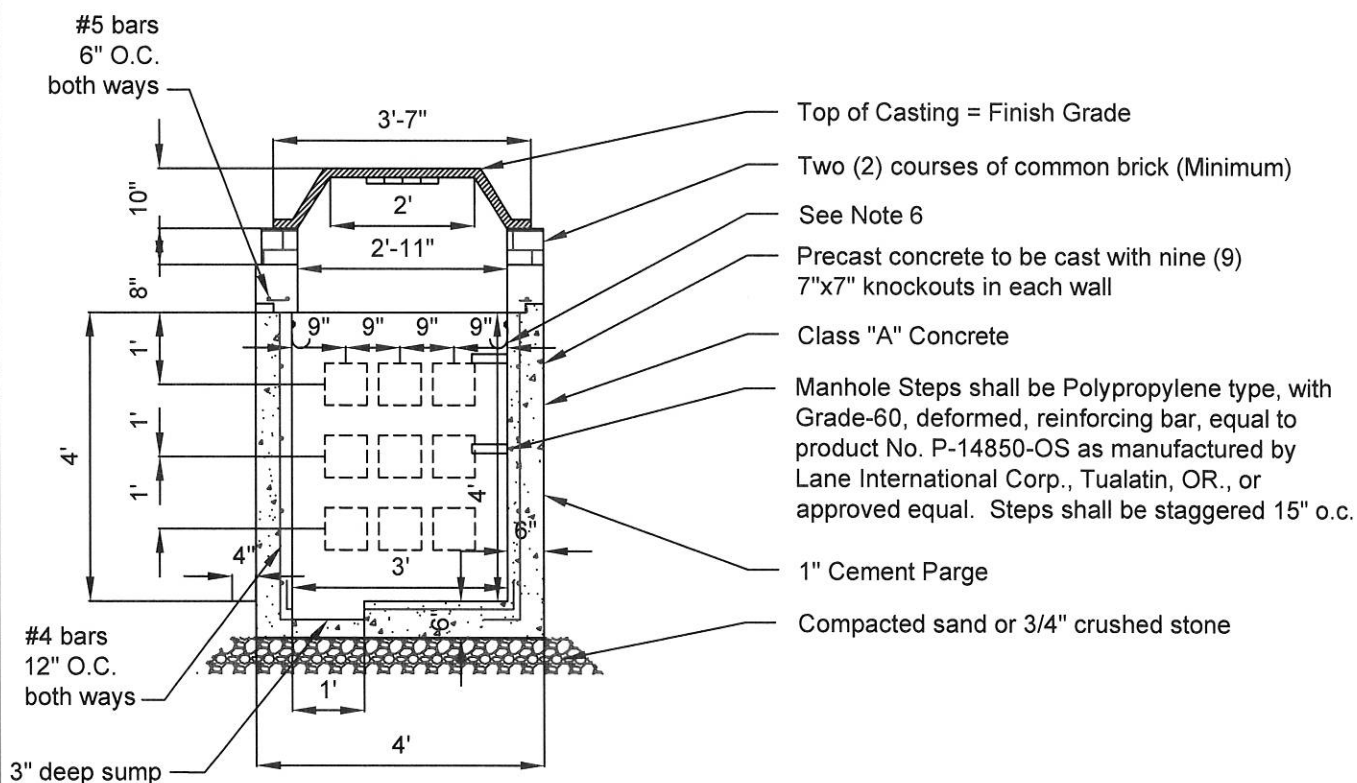
### Type "F" Manhole (Concrete Block)

## NOTES

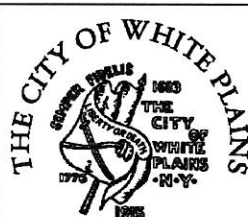


PLAN

1. Unless otherwise specified traffic control manholes shall have letters "TRAFFIC" and fire alarm covers shall have letters "WPFD" cast on the covers. The cover will have no vent holes.
2. Minimum cover over duct will be 2'-6".
3. The minimum compressive strength of the concrete shall be 4000 PSI.
4. The precast concrete structure shall comply with ASTM specifications C478.
5. All exposed ducts and conduits shall project 3" beyond the wall. Ducts shall be plugged and conduits shall be threaded and capped with an approved bushing.
6. A wire support hanger shall be installed 2'-6" below finish grade, (four (4) required per manhole). Hangers shall be similar to catalog number C-149, as manufactured by Steel City or approved equal.
7. Casting and cover shall be equal to Pattern No.1204 as manufactured by the Campbell Foundry Co., Harrison, N.J., or approved equal.



**TYPICAL SECTION**  
**Type "F" Manhole**  
 (Item 150)

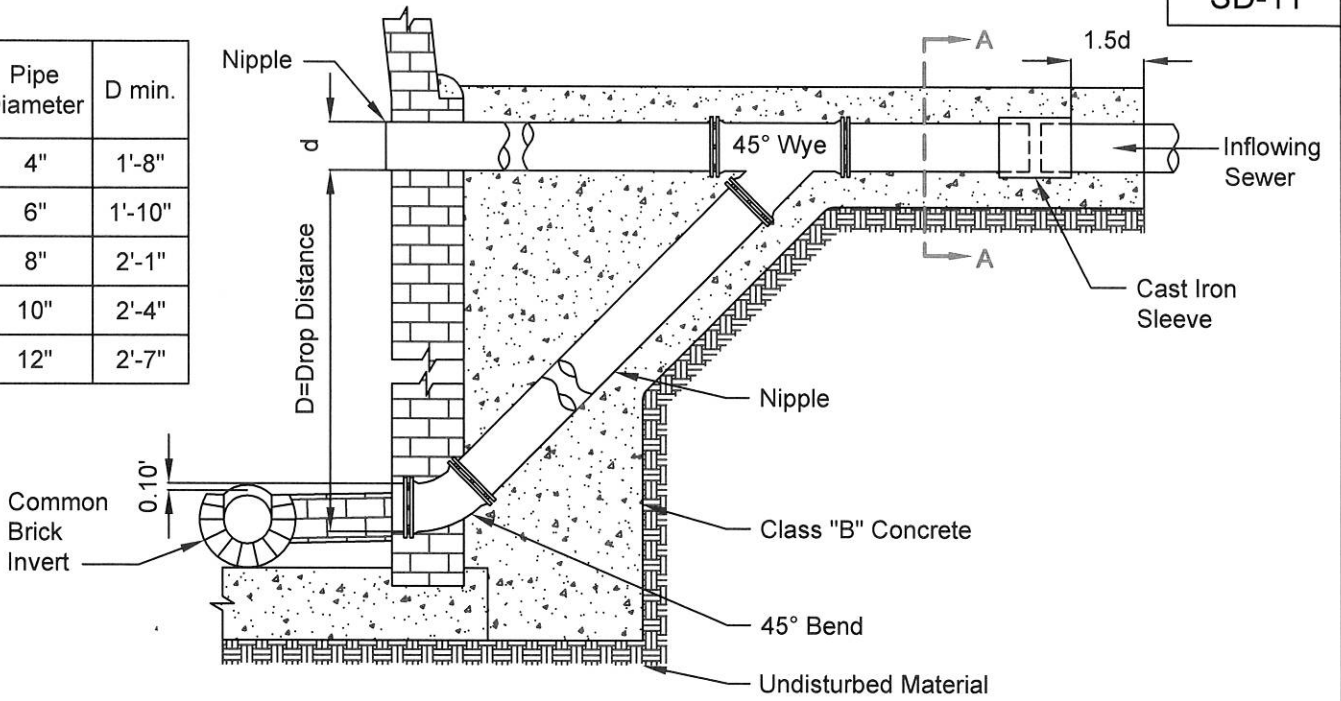


City of White Plains, N.Y.  
 Bureau of Engineering

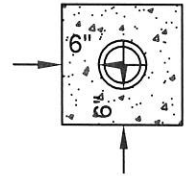
Standard Construction Detail

**Type "F" Manhole**  
**(Precast Concrete)**

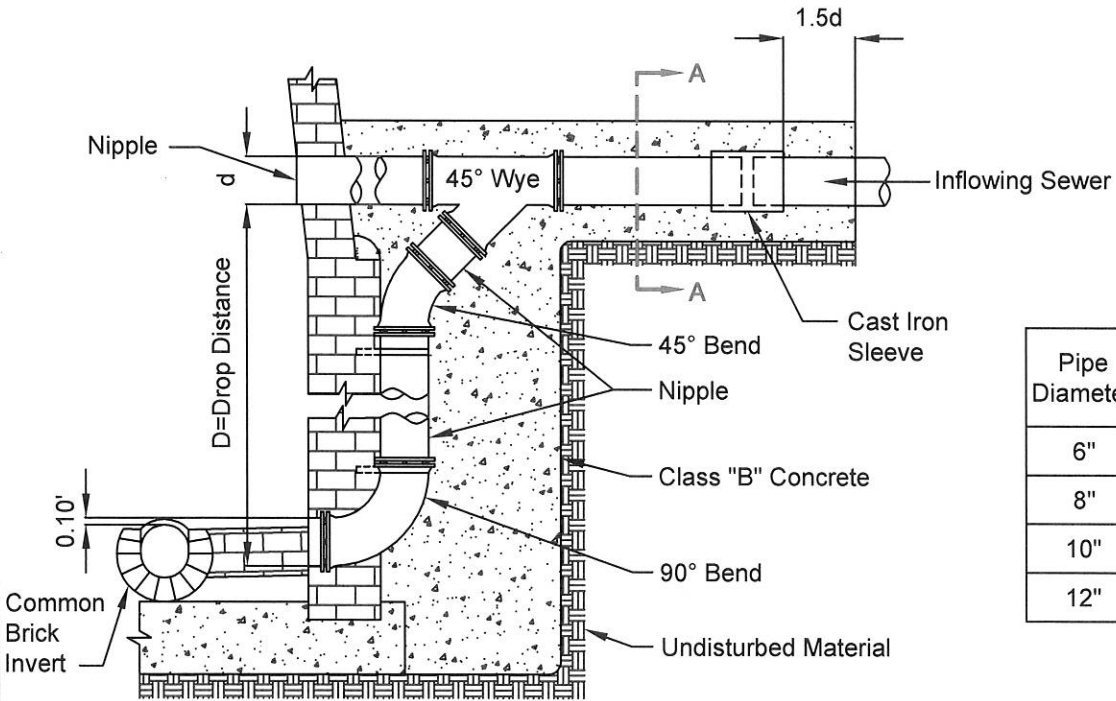
| Pipe Diameter | D min. |
|---------------|--------|
| 4"            | 1'-8"  |
| 6"            | 1'-10" |
| 8"            | 2'-1"  |
| 10"           | 2'-4"  |
| 12"           | 2'-7"  |



**Type "B" Drop Connection (D.I.P.)**  
(Item 124)

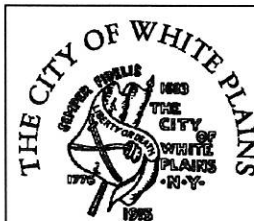


**Section A-A**



| Pipe Diameter | D min. |
|---------------|--------|
| 6"            | 3'-10" |
| 8"            | 4'-3"  |
| 10"           | 4'-9"  |
| 12"           | 5'-2"  |

**Type "A" Drop Connection (D.I.P.)**  
(Item 123)



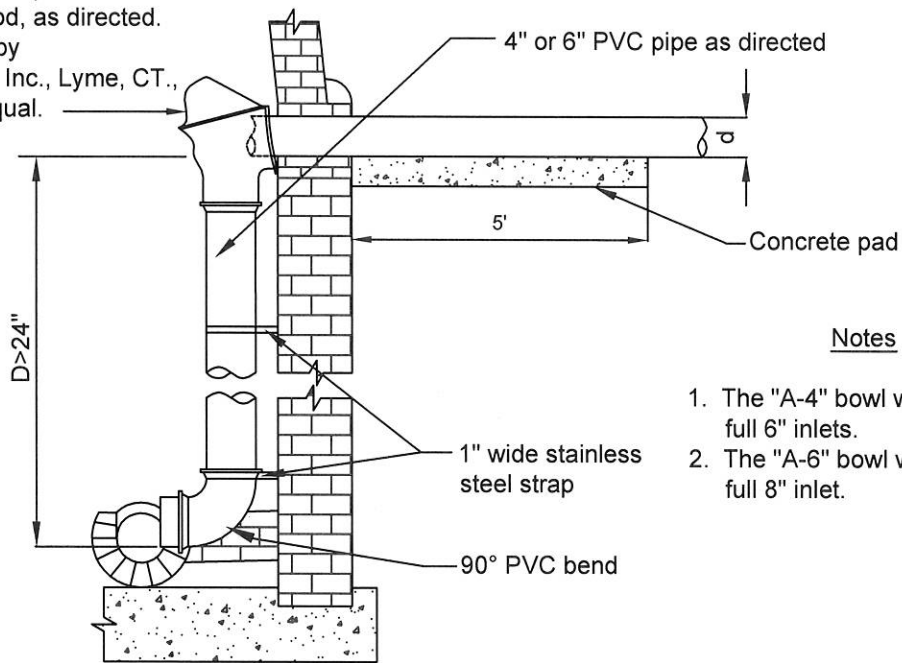
City of White Plains, N.Y.  
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Standard Construction Detail

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**Drop Connections**

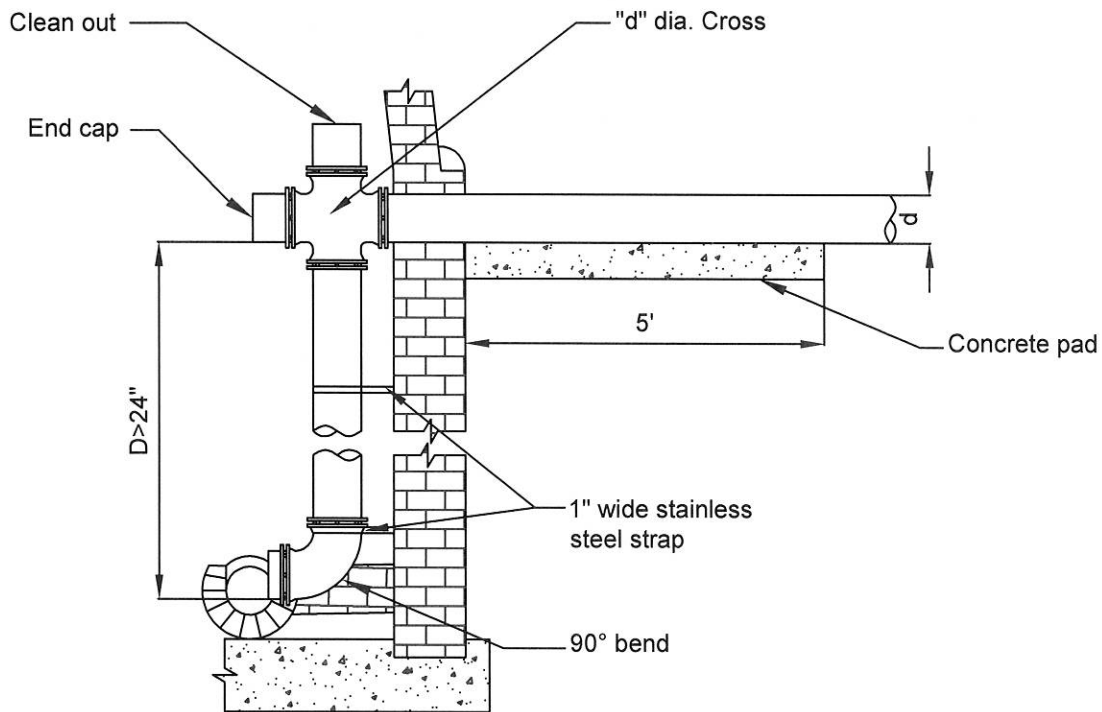
"A-4" or "A-6" Drop Bowl with  
Force Line Hood, as directed.  
Manufactured by  
Reliner/Duran, Inc., Lyme, CT.,  
or approved equal.



#### Notes

1. The "A-4" bowl will service up through full 6" inlets.
2. The "A-6" bowl will service up through full 8" inlet.

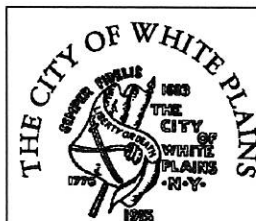
### Drop Bowl - Service Connection



### Inside Drop Connection

#### NOTES

3. Type "A" used when  $D > 5'-0"$ .  
Type "B" used when  $D \leq 5'-0"$ .
4. Inside drop connection to be used only when specified by the engineer.
5. Diameter of all fittings to be same as inflowing sewer.
6. Location of drop connection in manhole to be approved by DPW.
7. Drop connection to be made using Class 52 ductile iron mechanical joint pipe and fittings.



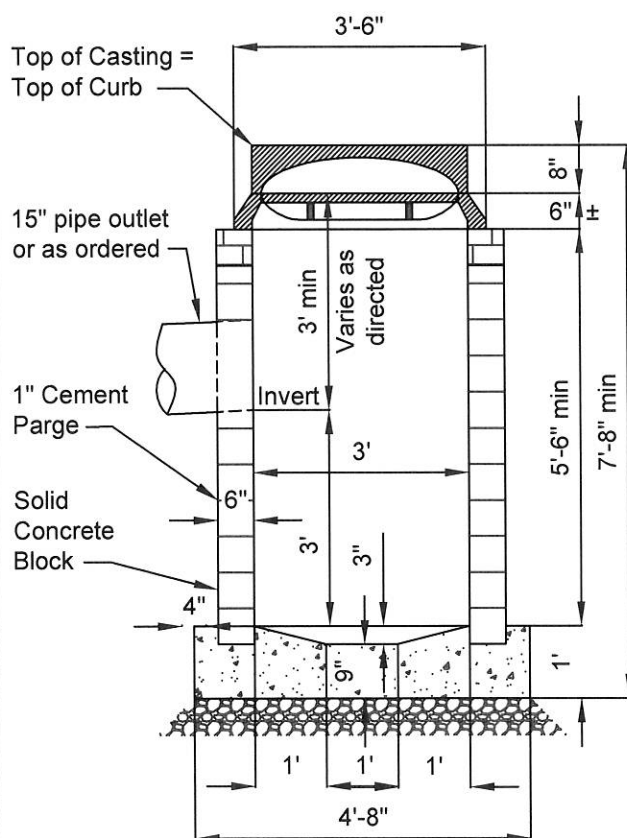
City of White Plains, N.Y.  
Bureau of Engineering

Standard Construction Detail

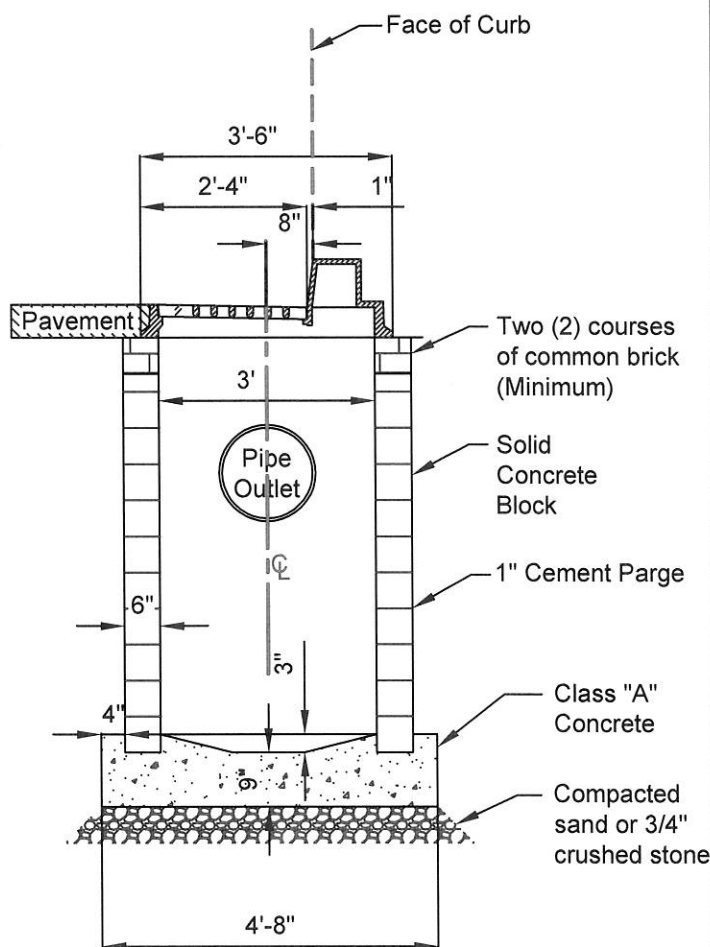
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**Drop Connections**

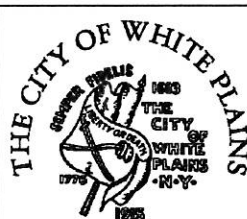




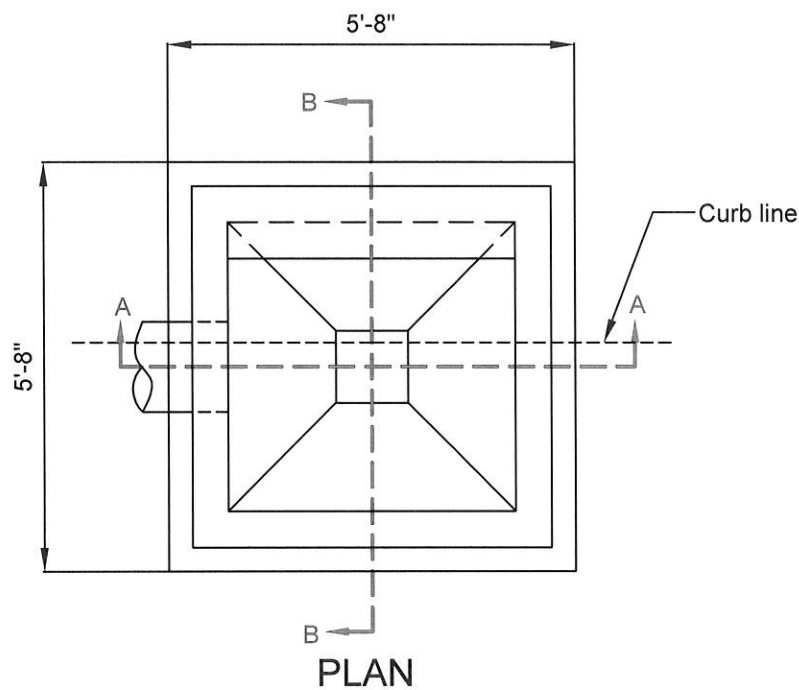
Type "A" Catch Basin  
(Item 125)



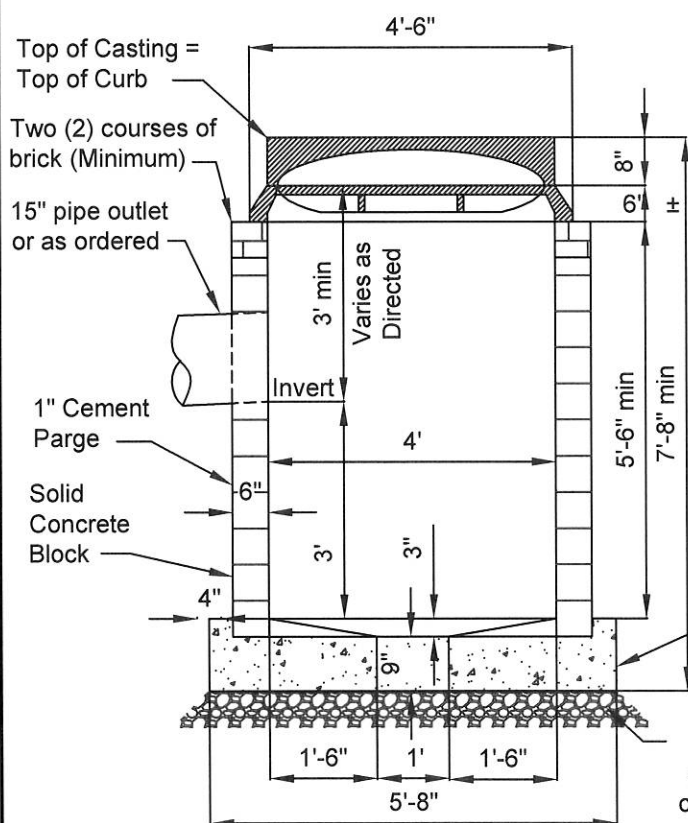
SECTION B-B



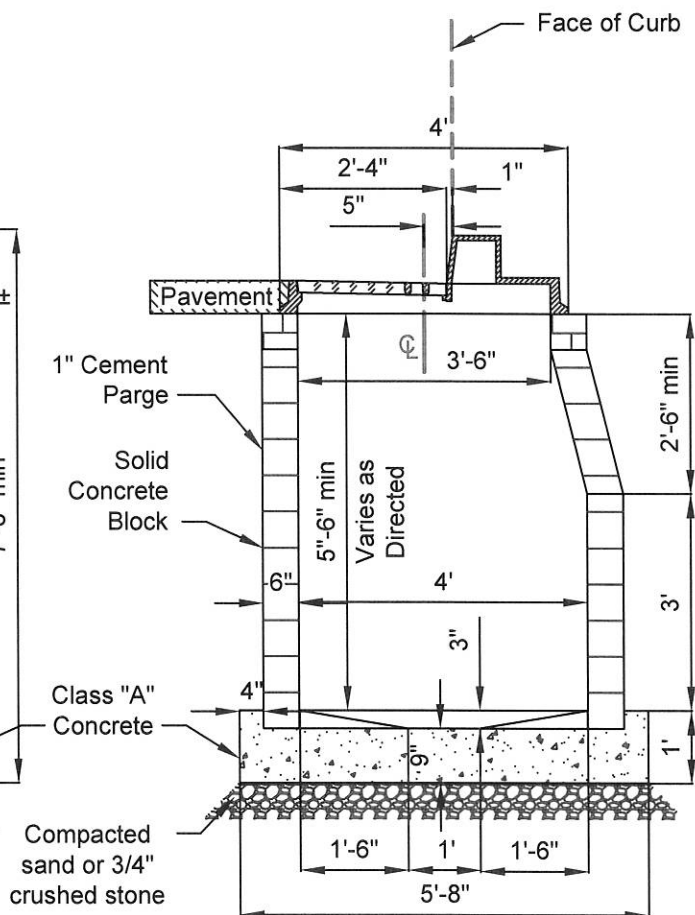
## Type "A" Catch Basin (Concrete Block)



1. Top of curb inlet to be set to conform to top of curb grade.
2. Grade shall be depressed and set parallel to normal pavement section.
3. Adjacent curb to be chipped or formed to batter of catch basin curb piece.
4. Casting and grate shall be equal to pattern No. 2618, with ECO-Phase II Type "STD" or Type "J" Curb Piece, as directed, with the words "DUMP NO WASTE DRAINS TO WATERWAYS" cast on it, as manufactured by Campbell Foundry Co., Harrison, N.J., or approved equal.



SECTION A-A



SECTION B-B

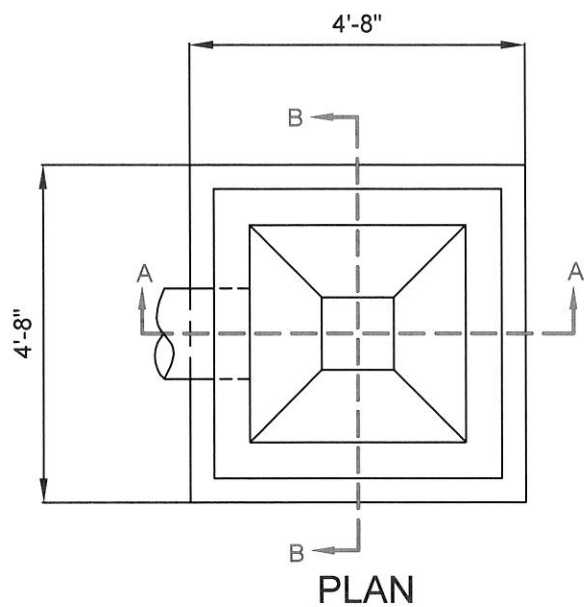
Type "B" Catch Basin  
(Item 126)



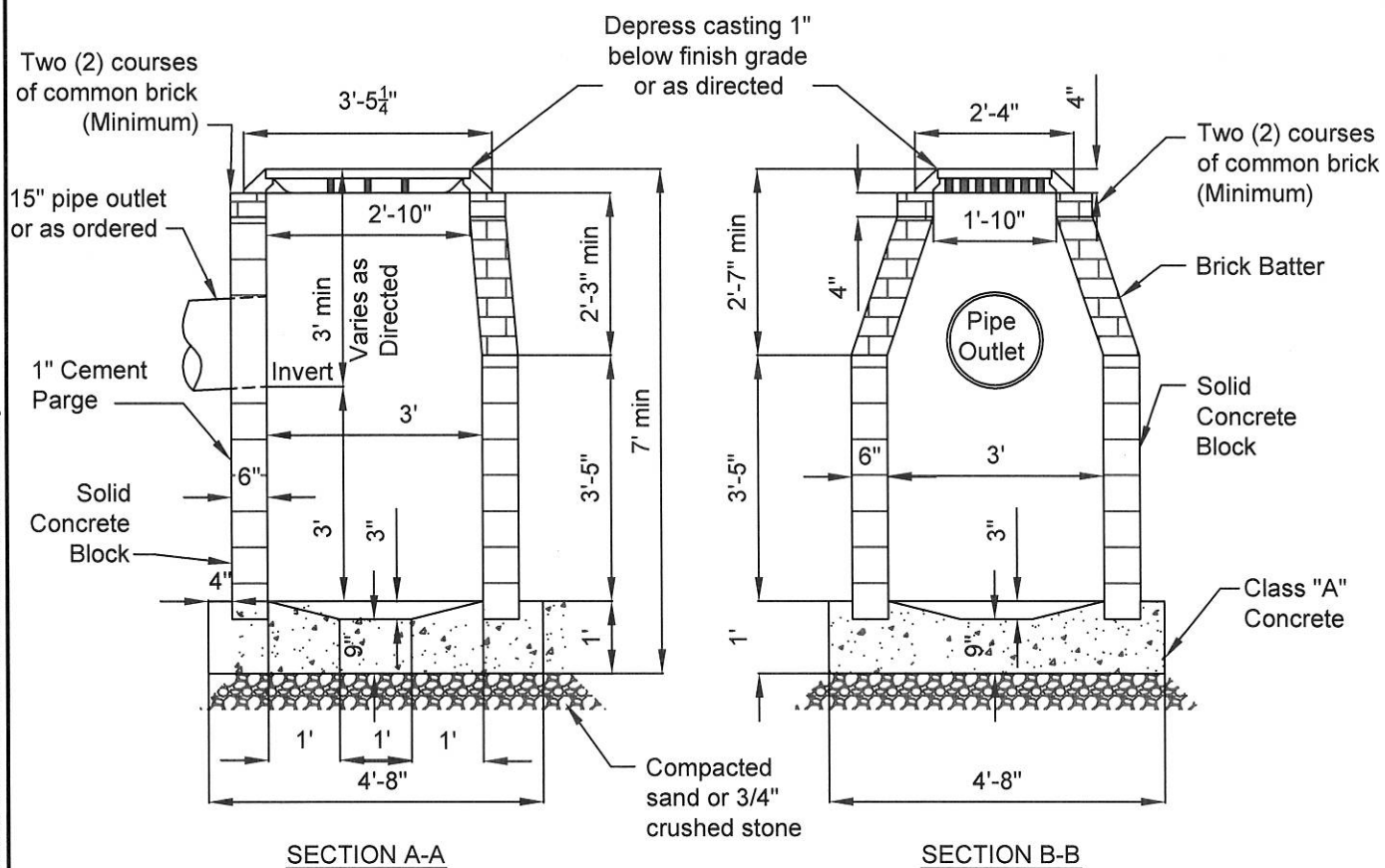
City of White Plains, N.Y.  
Bureau of Engineering

### Standard Construction Detail

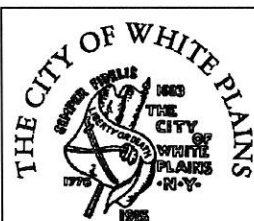
### Type "B" Catch Basin (Concrete Block)

**NOTES**

1. Casting shall be depressed 1" below pavement finish grade or as directed.
2. Casting and grate shall be equal to pattern No. 3430-A, as manufactured by Campbell Foundry Co., Harrison, N.J., or approved equal.



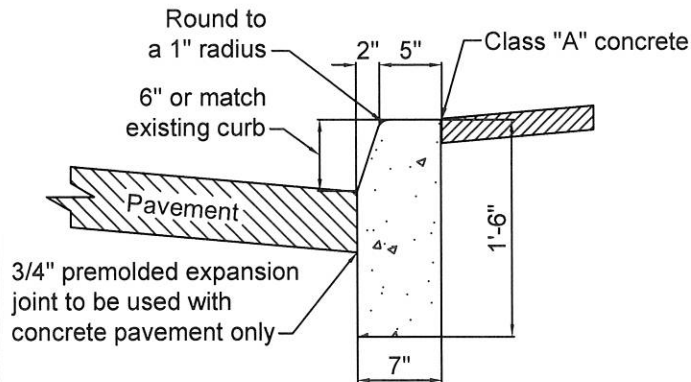
**Type "C" Catch Basin**  
(Item 127)



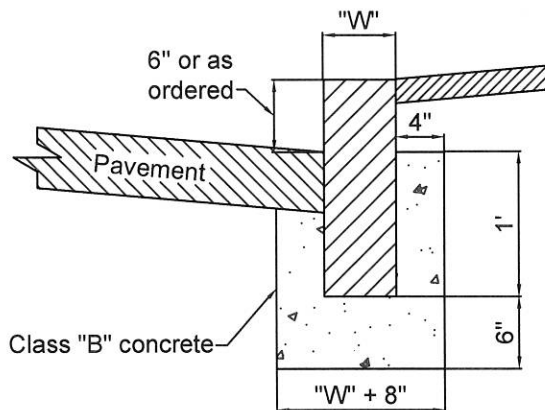
City of White Plains, N.Y.  
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Standard Construction Detail

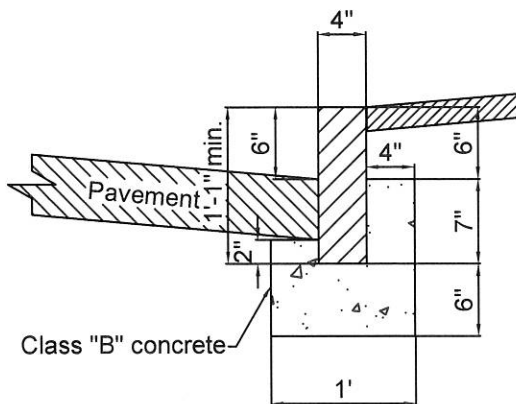
**Type "C" Catch Basin**  
(Concrete Block)



**Concrete Curb**  
(Item 71)



**Existing Curb**  
(Items 64 & 65)



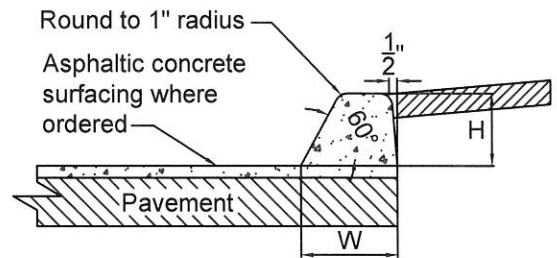
**Quarry or Fieldstone Curb**  
(Item 66)

#### NOTES

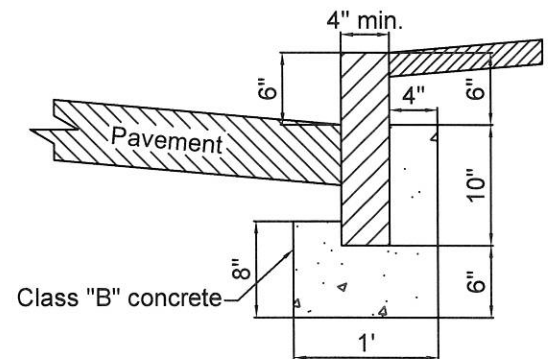
1. Granite curb to be split face, sawn top, equal to Type V4x16 for straight curb and V5x16 for radius curb as manufactured by either North Carolina Granite, Williams Stone or Geneva Granite.
2. Minimum length of straight curb shall be 4'-0" and radius curb shall be 2'-6".
3. 1/4" round or "Buzzed Edge" on front arris line - color gray.

#### NOTE

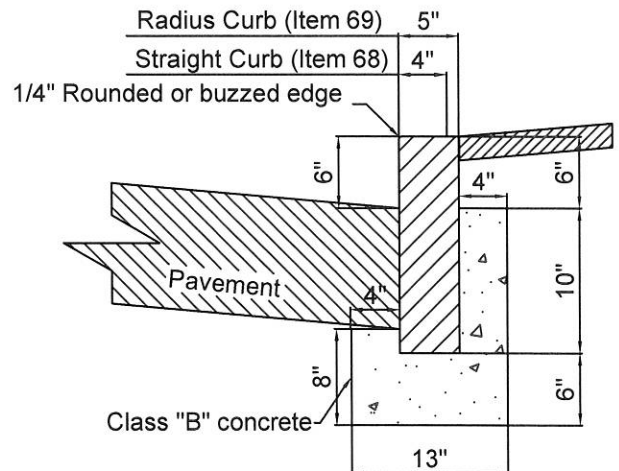
When H=4, W=6 (Item 72A)  
When H=6, W=8 (Item 72B)  
See Standard Construction Specifications for the type of mixture.



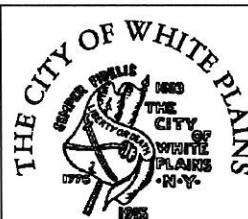
**Asphaltic Concrete Berm**  
(Item 72)



**Bluestone Curb**  
(Item 67)



**Granite Curb**  
(Items 68 & 69)

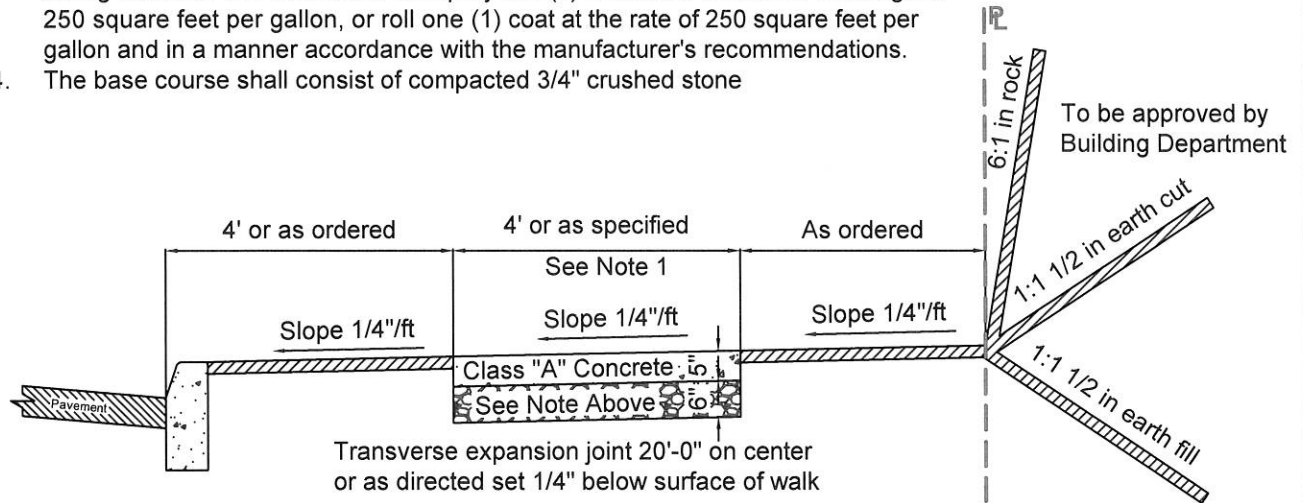


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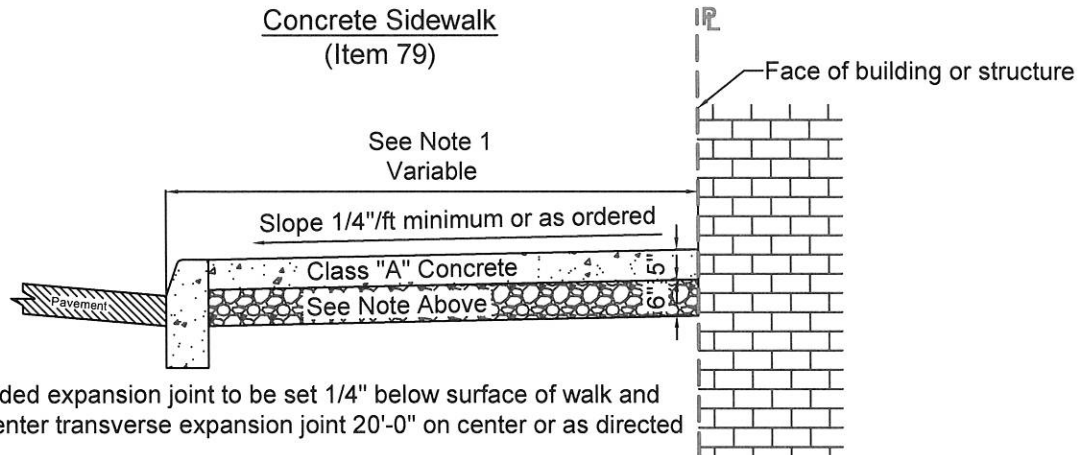
Standard Construction Detail

**Curbs and Berms**

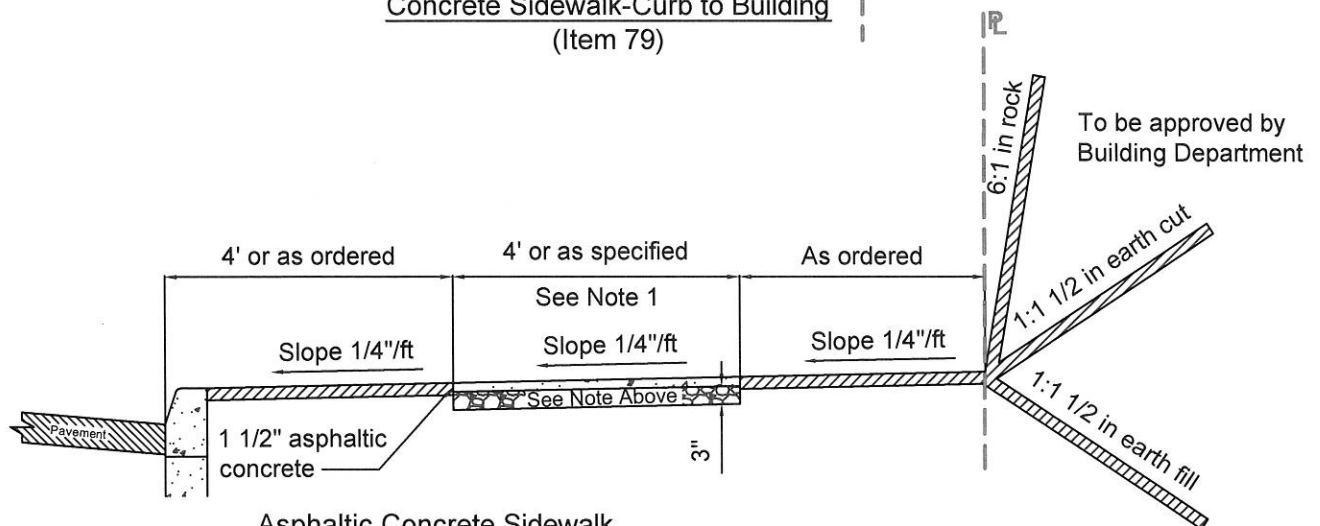
1. Sidewalks wider than 4'-0" or as directed shall be reinforced with epoxy coated welded wire fabric 10 ga. 6" x 6" W1.4 x W1.4
2. All concrete sidewalks shall have a broomed finish surface with scores at 5'-0" O.C.
3. Immediately after finishing the concrete, the Contractor shall apply an approved curing material. The Contractor will spray two (2) coats at a combined coverage of 250 square feet per gallon, or roll one (1) coat at the rate of 250 square feet per gallon and in a manner accordance with the manufacturer's recommendations.
4. The base course shall consist of compacted 3/4" crushed stone



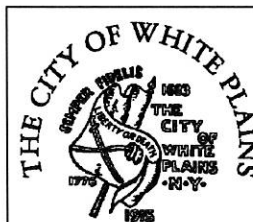
**Concrete Sidewalk**  
(Item 79)



**Concrete Sidewalk-Curb to Building**  
(Item 79)



**Asphaltic Concrete Sidewalk**  
(Item 80)

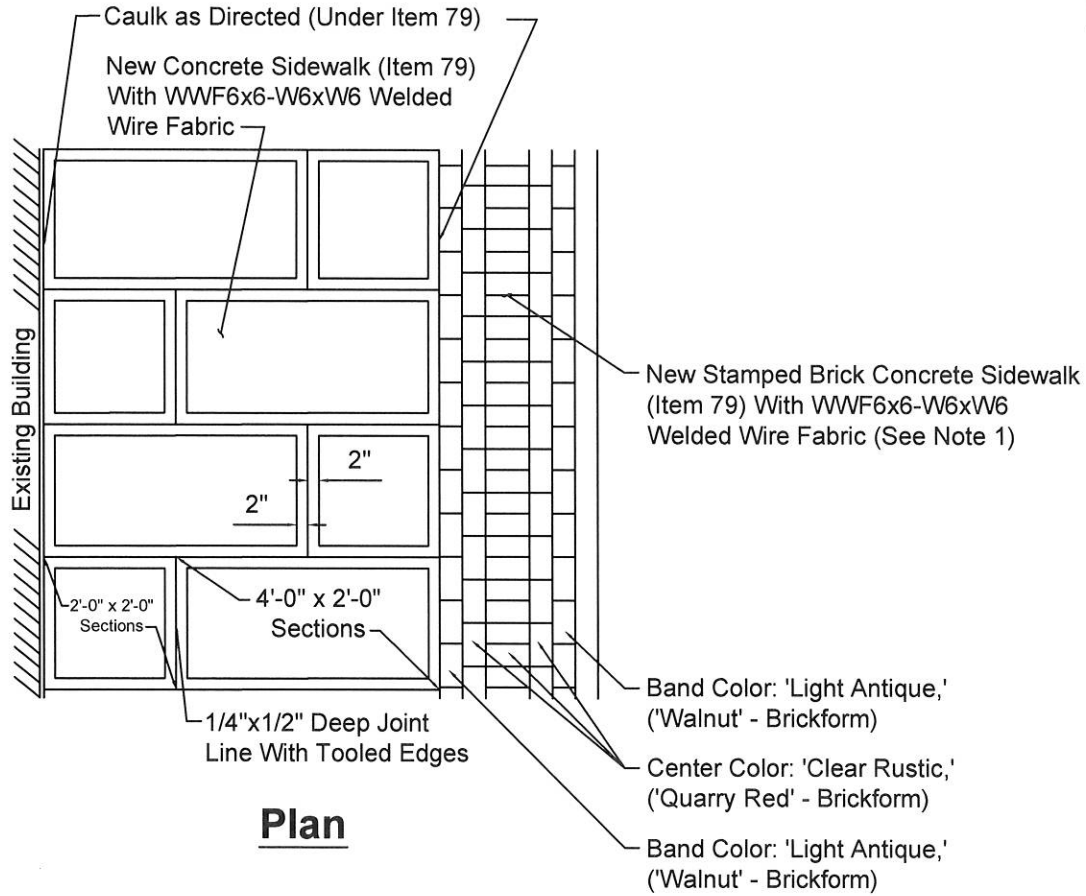


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**Sidewalks**

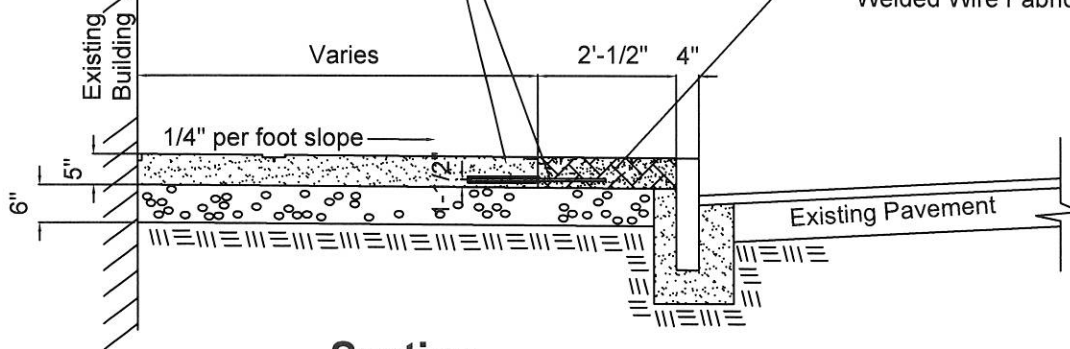


### Plan

3/4" dia x 2'-0" long Plain Bars 3'-0" O.C.  
One End Sleeved (Under Item 79)

New Concrete Sidewalk (Item 79) With  
WWF 6x6-W6xW6 Welded Wire Fabric

New Stamped Brick Concrete Sidewalk  
(Item 79) With WWF6x6-W6xW6  
Welded Wire Fabric (See Note 1)



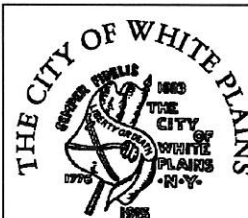
### Section

### New Concrete Sidewalk (Item 79) Promenade Pattern and Stamped Concrete Band

N.T.S.

### NOTES

1. Installation of the stamped brick concrete sidewalk shall be performed by a contractor licensed by the Bomanite Corporation, Madera, CA; Brickform, Rancho Cucamonga, CA, or approved equal.
2. Refer to Standard Specification Item 79 for additional information and Supplementary Specification.



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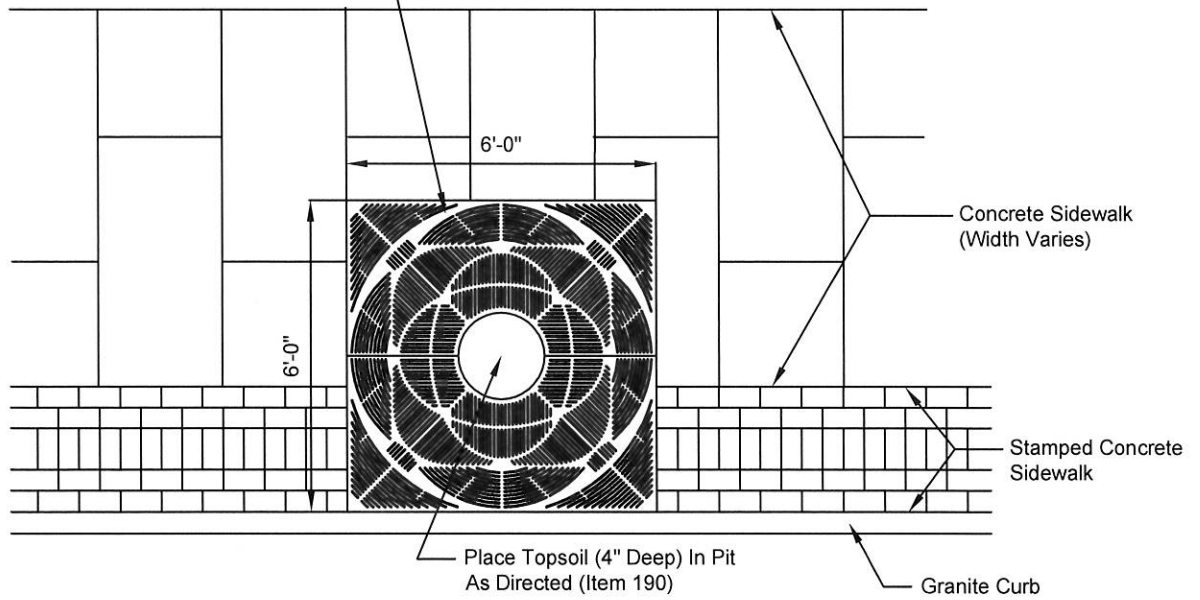
Standard Construction Detail

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**Sidewalks**

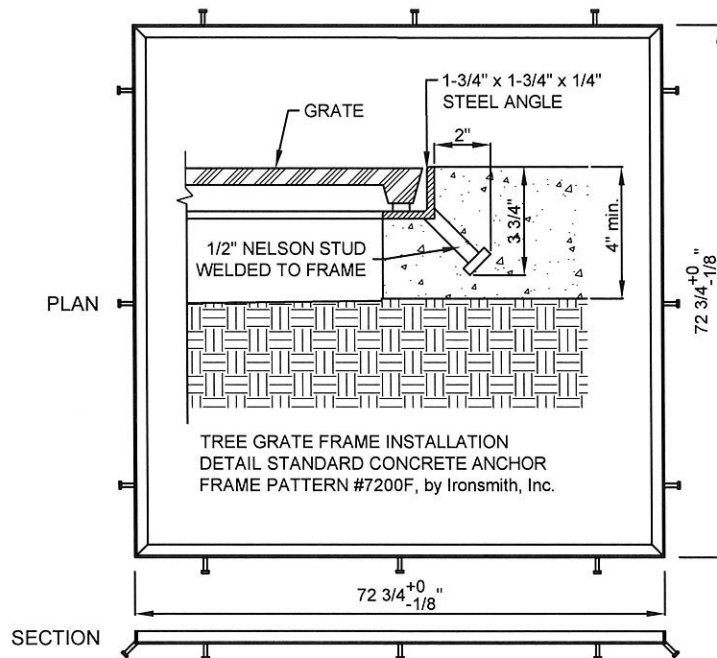


6' x 6' Tree Grate With Frame as  
Manufactured by Ironsmith, Inc.  
'CAMELIA' Pattern #M-7258 (Item 207S)



### **Plan View - Promenade Sidewalk with Tree Grate**

Scale: N.T.S.

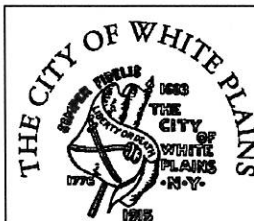


### **Profile - Tree Grate and Frame Installation**

Scale: N.T.S.

### **Detail - Tree Grate Installation (Item 207S)**

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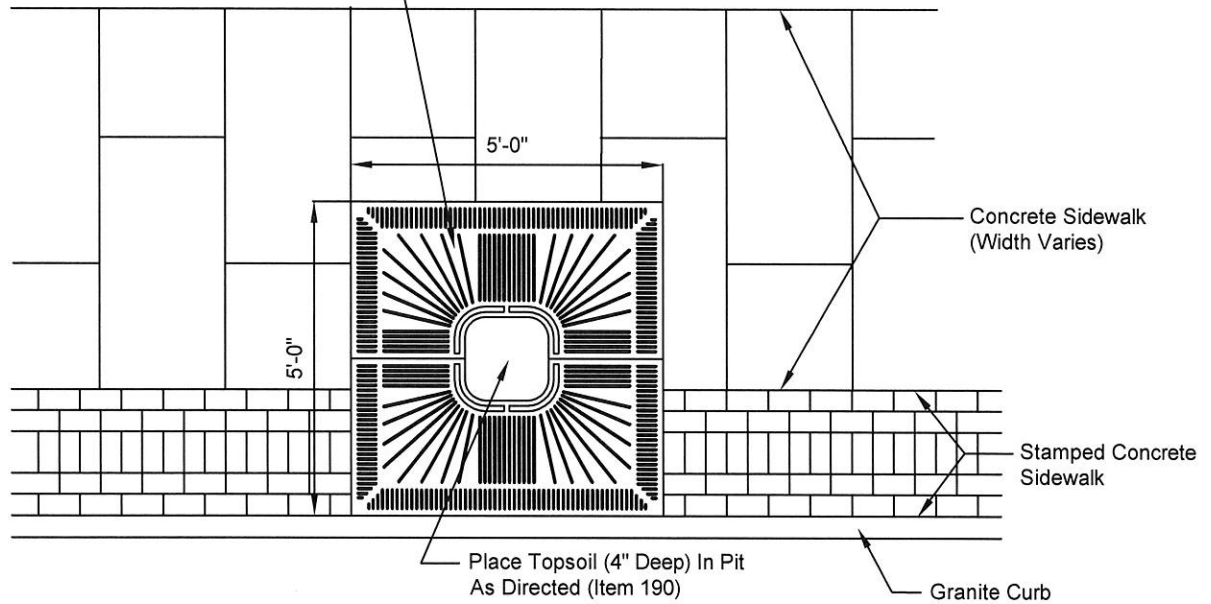
City of White Plains, N.Y.  
Bureau of Engineering

Standard Construction Detail

Page 1 of 2

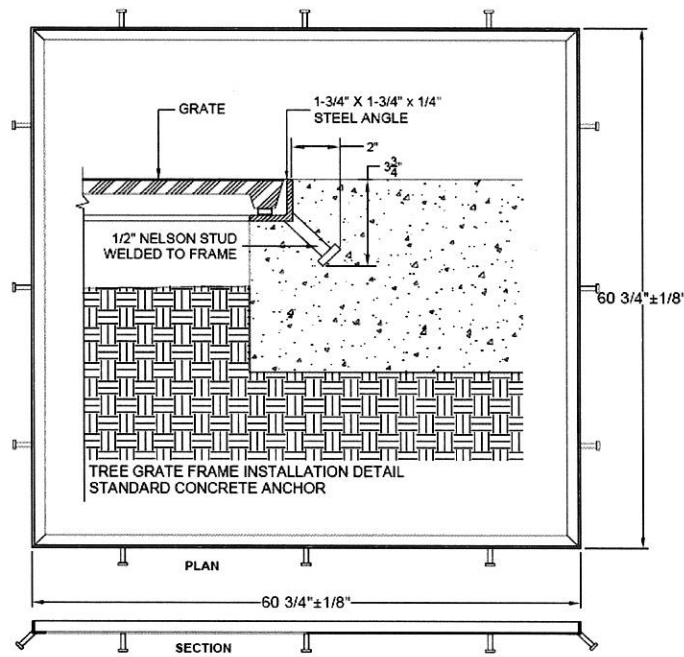
**6' Tree Grate & Installation**

New 5' x 5' Tree Grate With Frame as  
Manufactured by Ironsmith, Inc. With  
'BRIAR' Pattern #M-6044 (Item 207S)



### Plan View - Promenade Sidewalk with Tree Grate

Scale: N.T.S.

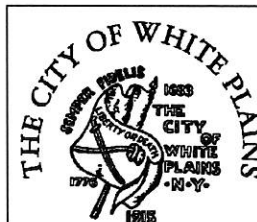


### Profile - Tree Grate and Frame Installation

Scale: N.T.S.

### Detail - Tree Grate Installation (Item 207S)

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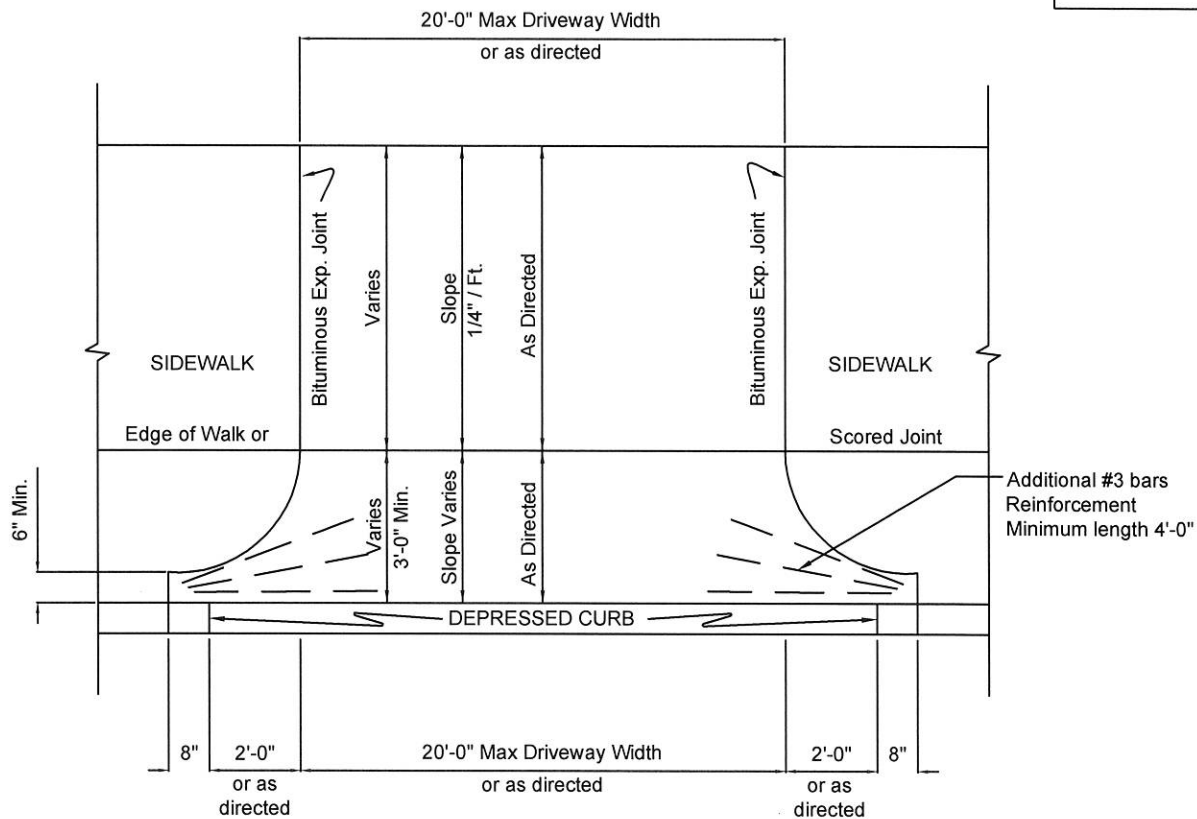
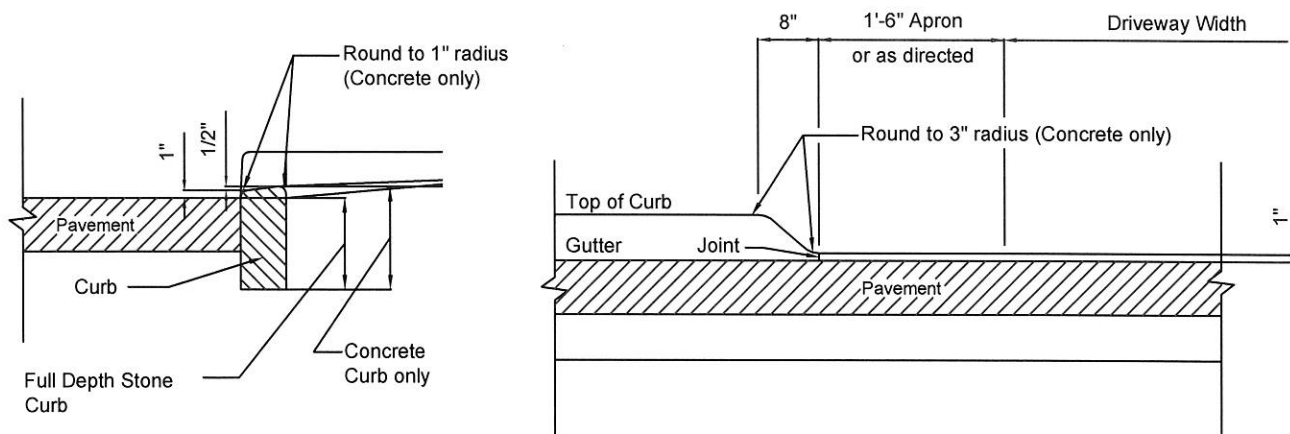


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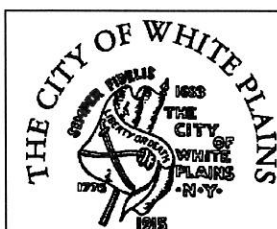
Standard Construction Detail

Page 2 of 2

**5' Tree Grate & Installation**

**PLAN VIEW - RESIDENTIAL DRIVEWAY****SECTION - DEPRESSED CURB****NOTE**

1. The base course shall consist of compacted 3/4" crushed stone.

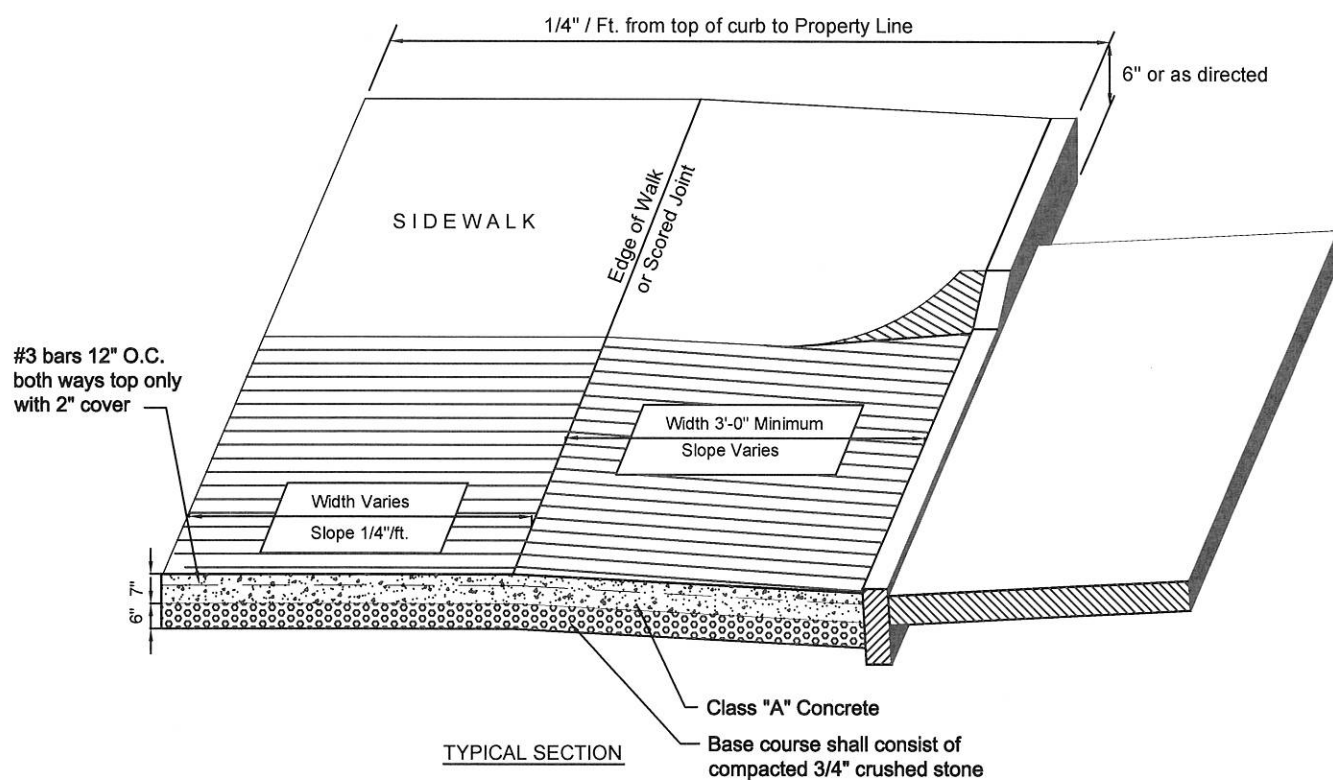


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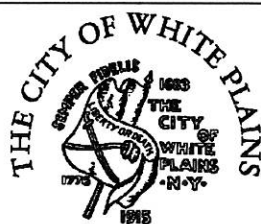
Standard Construction Detail

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**Driveways**



**REINFORCED CONCRETE DRIVEWAY**  
(Item 81)

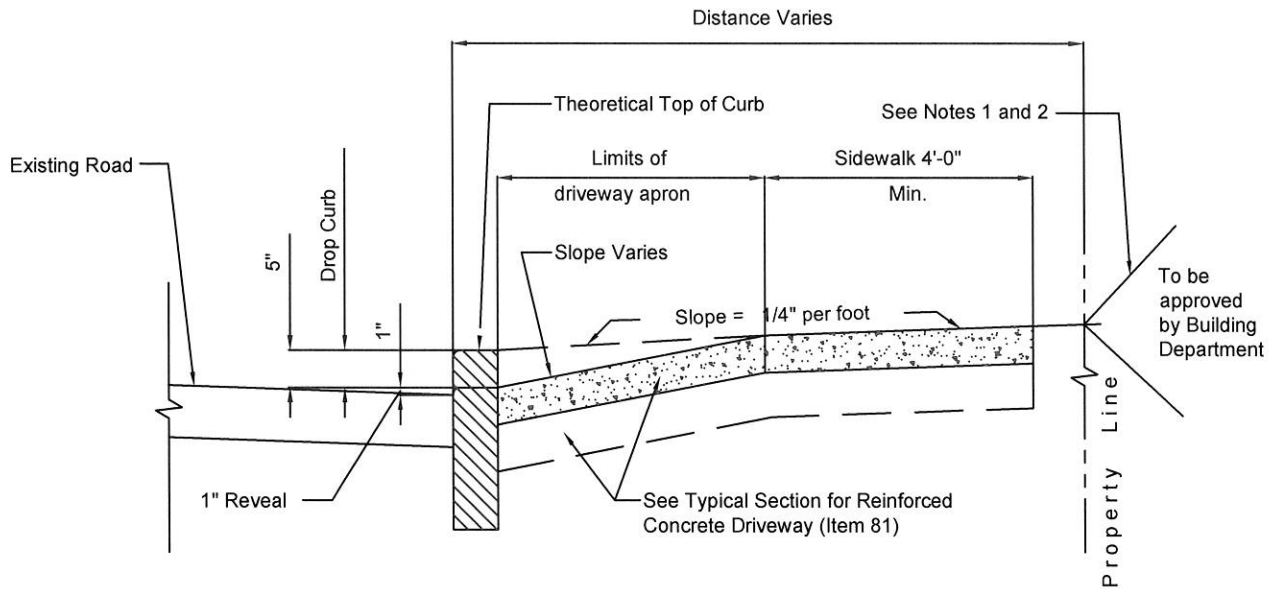


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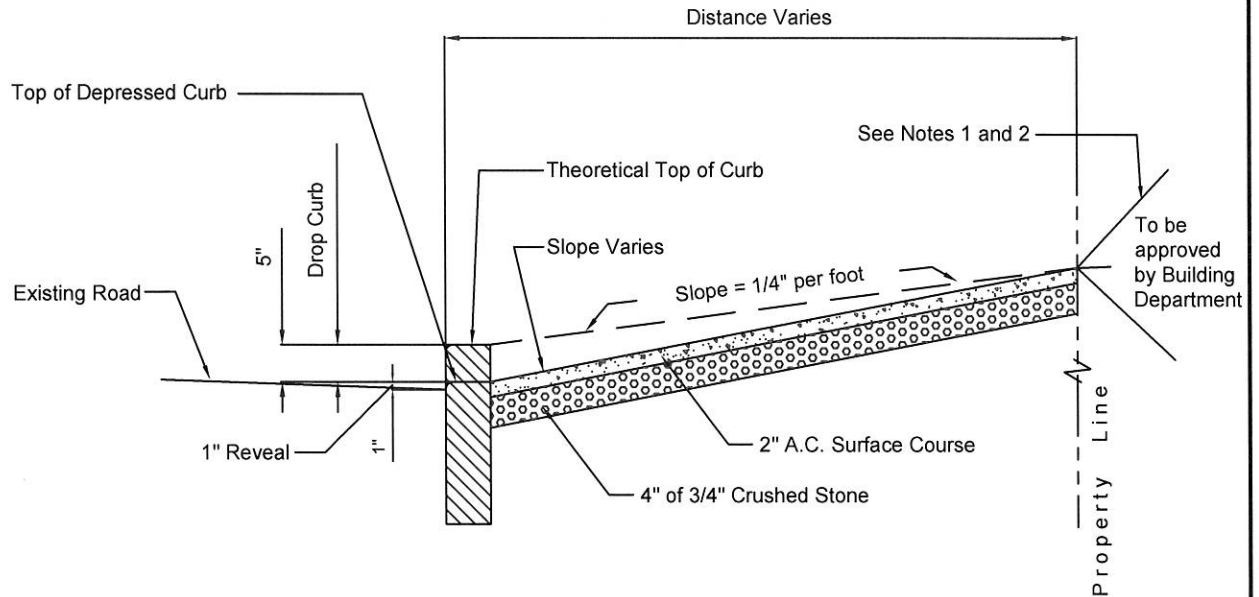
Standard Construction Detail

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**Driveways**



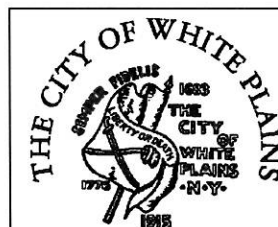
**SECTION AT ASPHALTIC CONCRETE DRIVEWAY  
WITH CONCRETE SIDEWALK**



**SECTION AT ASPHALTIC CONCRETE DRIVEWAY  
WITH NO SIDEWALK**

**NOTES**

1. For one and two family residences- Do not exceed 12% Grade from the Property line.
2. For Multi Family and Commercial Building- Do not exceed 6% from the Property line for a Distance of 20 L.F. and 12% thereafter.



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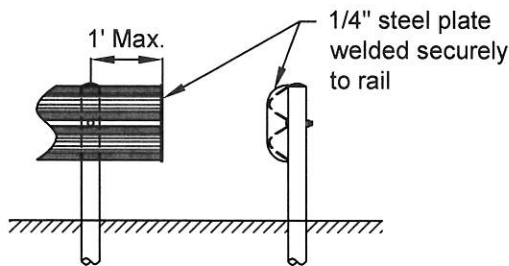
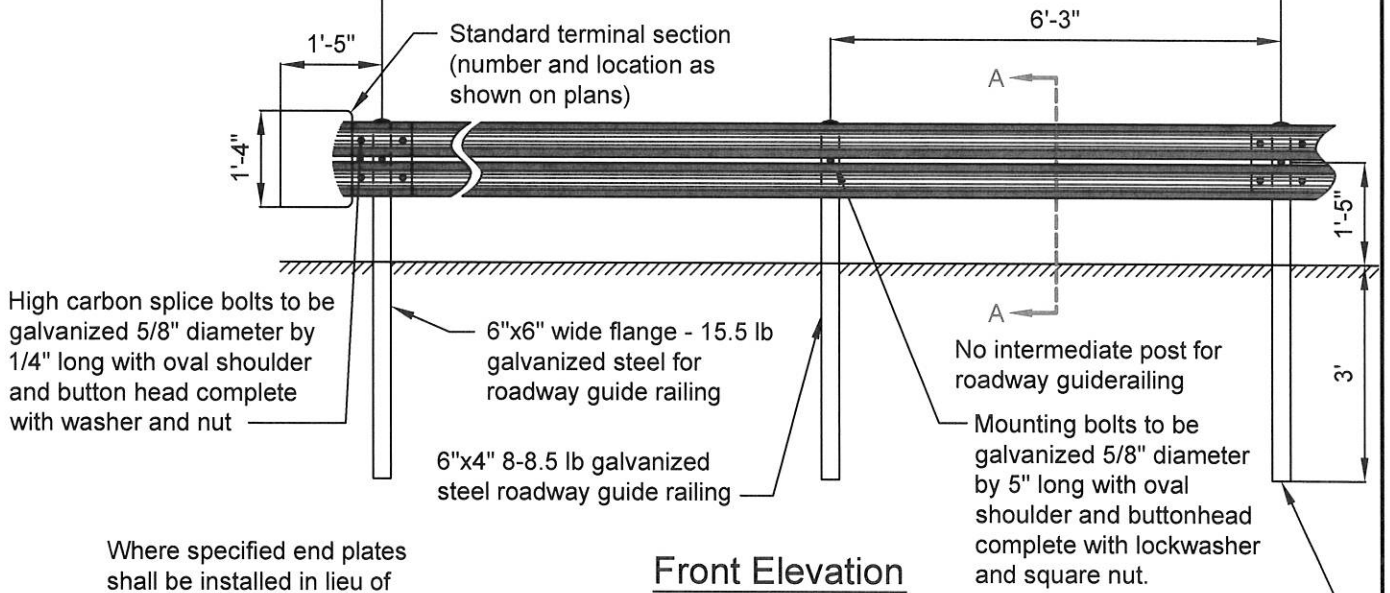
Standard Construction Detail

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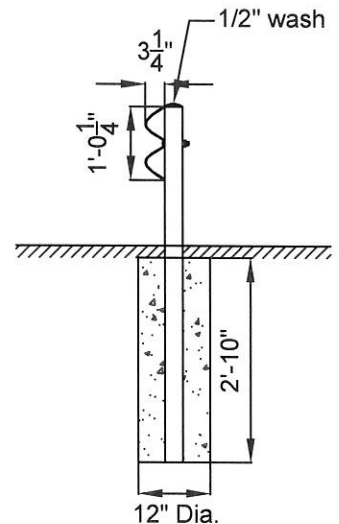
**Driveways**

12'-6" Max. for roadway guiderailing for parking lots or meter spacing when applicable

SD-25

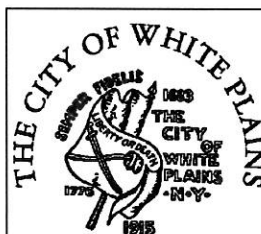


### Steel Bumper Rail (Item 218)



### NOTES

1. All concrete will be Class "A".
2. All nuts will be at the rear face of the rail and posts.
3. Post to be set in concrete foundation only in those areas where fill exceeds 1'.
4. All pipe for parking lot appurtenances shall be standard weight schedule 40, welded or seamless steel pipe ASTM Designation A-53.
5. Galvanization of bumper rail and posts for all parking lot appurtenances shall be done by the hot-dip method and in accordance with ASTM specification A-123.
6. The contractor's attention is directed to the construction specifications pertaining to the specified items.
7. All steel post for roadway guide railing to be ASTM A-7 structural steel.
8. Tops of all posts shall be sawed and burs removed (carefully).
9. Galvanized steel bumper to be 10 gauge Flex-beam guard rail as manufactured by Armco Drainage and Metal Products or approved equal.



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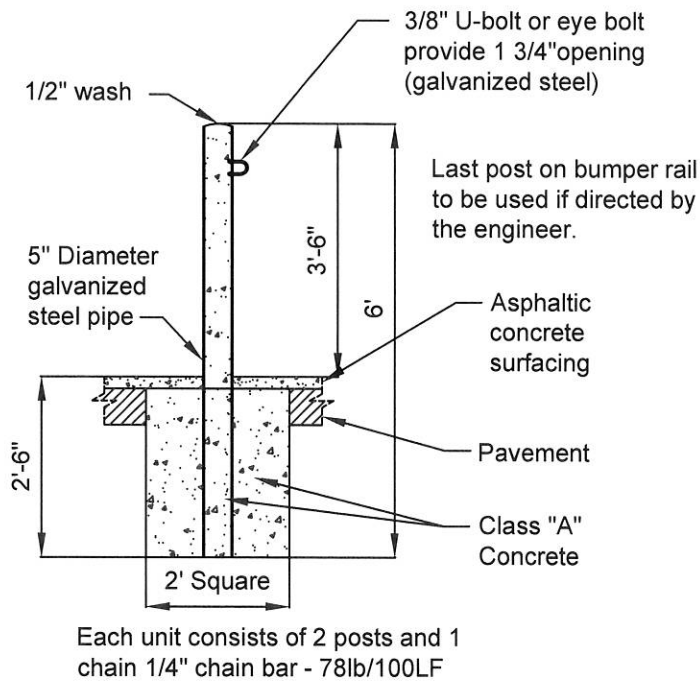
Standard Construction Detail

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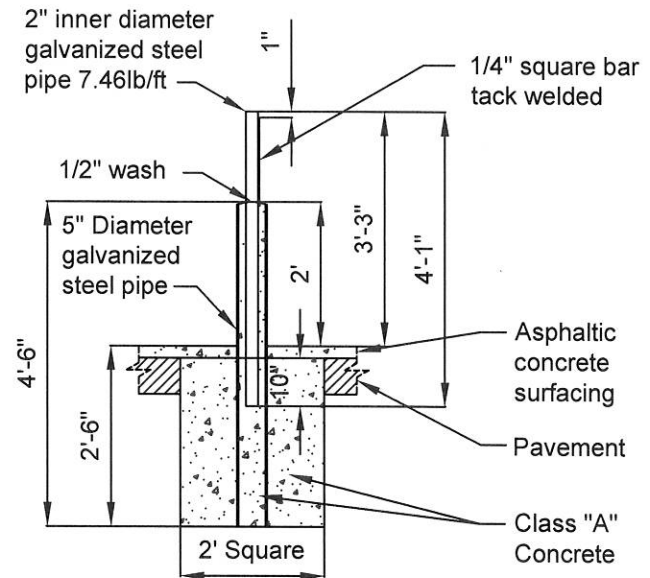
Parking Lot Appurtenances

Revised: 05-09-07

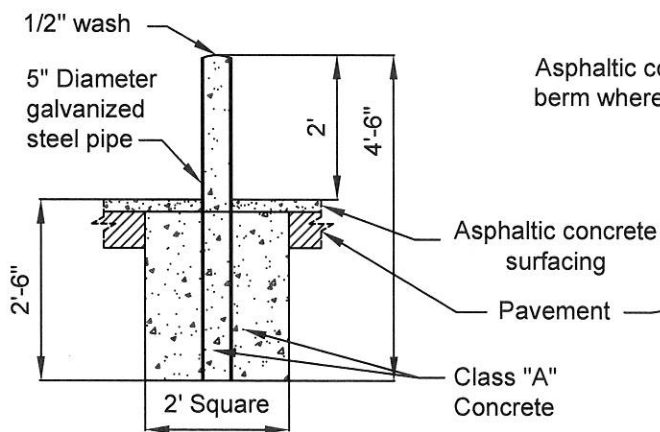




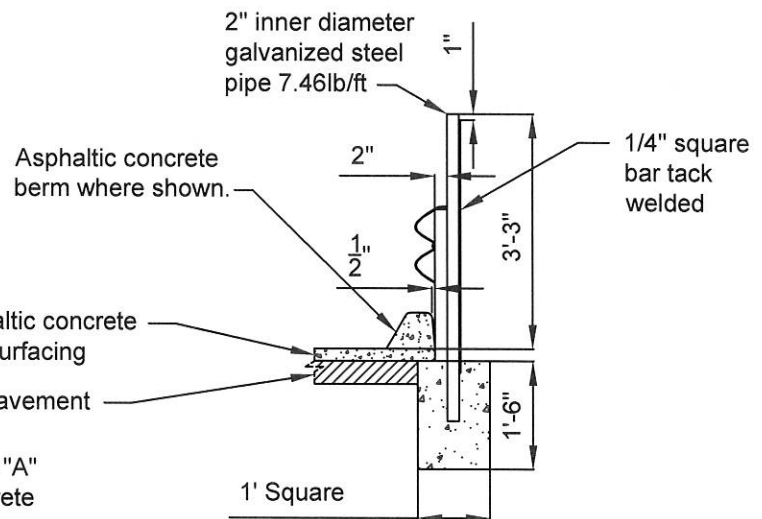
**Post And Chain Barrier**  
(Item 216)



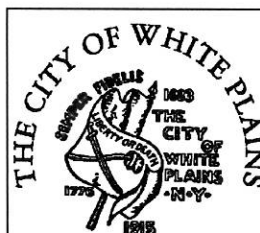
**Bumper Meter Post**  
(Item 211)



**Bumper Post**  
(Item 215)



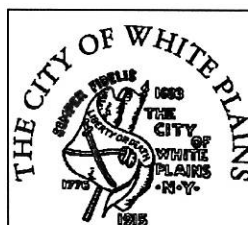
**Meter Post**  
(Item 212)



| ITEM<br>NUMBER | TYPE   | DIMENSIONS |            |              |     |              | REINFORCING  | MAXIMUM<br>MOMENT IN<br>FT-K AT TOP<br>OF EARTH | USE   | NOTES   |
|----------------|--------|------------|------------|--------------|-----|--------------|--|---|---|---|
|                |        | A1         | A2         | B            | C   | D thru H     |  |   |   |   |
| 153A           | "FA-1" | 28"        | 24"        | 30"          | 24" | ----         | none required  | ----  | Fire alarm pedestal   | D- Bolt diameter and length to be as furnished and certified by pole or controller cabinet manufacturer                             |
| 153B           | "SL-1" | 24"        | 24"        | 40"          | 30" | SEE<br>NOTES | none required  | ----  | Street light pole   |   |
| 153C           | "CC-1" | VARIES     | VARIES     | 32"          | 24" |              | none required  | ----  | Controller cabinet  |   |
| 153D           | "TC-1" | 16"        | 16"        | 30"          | 30" |              | none required  | ----  | Pedestal pole   | E- Thickness of base plate + thickness of nut + 1/2"  |
| 153E           | "TC-2" | 36"        | 36"        | 60"          | 30" |              | Vertical: 8- #5 bars<br>Horizontal: #5 bars 1' o.c.  | 40 & under                                      | Traffic control,<br>cantilever structures,<br>or strain poles | F- Bolt circle as determined by pole manufacturer and shown on shop drawings  |
| 153F           | "TC-3" | 36"        | 36"        | 72"          | 30" |              | Vertical: 10- #5 bars<br>Horizontal: #5 bars 1' o.c. | 53  |   |   |
| 153G           | "TC-4" | 36"        | 36"        | 90"          | 30" |              | Vertical: 16- #5 bars<br>Horizontal: #5 bars 1' o.c. | 85  |   |   |
| 153H           | "TC-5" | 36"<br>48" | 36"<br>48" | 108"<br>90"  | 30" |              | Vertical: 16- #5 bars<br>Horizontal: #5 bars 1' o.c. | 115   |   | G- $\frac{A-(H+4)}{2}$  |
| 153I           | "TC-6" | 36"<br>48" | 36"<br>48" | 126"<br>108" | 30" |              | Vertical: 16- #6 bars<br>Horizontal: #5 bars 1' o.c. | 154   |   |   |
| 153J           | "TC-7" | 48"        | 48"        | 126"         | 30" |              | Vertical: 16- #6 bars<br>Horizontal: #5 bars 1' o.c. | 194   |   |   |
| 153K           | "TC-8" | 48"        | 48"        | 138"         | 30" |              | Vertical: 16- #7 bars<br>Horizontal: #5 bars 1' o.c. | 243   |   | H- Base plate dimensions furnished on shop drawings to be confirmed by the engineer before setting the forms for the concrete base. |

## NOTES

- Anchor Bolts** - Unless otherwise specified, anchor bolts will be furnished and set by the contractor. Prior to ordering and/or setting anchor bolts, the contractor shall be required to verify all bolt sizes and bolt circles from the shop drawings provided by the manufacturer of the poles.  
City to furnish anchor bolts and template for bolt locations prior to construction of controller cabinet foundation.  
Threaded portion at top of anchors to be provided with a heavy coating of grease to prevent concrete adhering to threads.
- Conduit** - Bottom end of sweep will be the point from which payment for conduit will be measured. The contractor shall connect sweeps to the conduit with couplings or adapters whichever is required. An approved bushing cap shall be placed on all exposed sweeps and plug buried end with oakum and Johns-Manville Dux Seal or approved equal. Cast in place conduit shall extend outside the footing far enough to allow connection of the next conduit section.
- Plumbing Pole** - A level concrete pad shall be integrally poured on top of types SL-1 and TC-1 bases. The edge of the pad will extend 2" beyond the edges of the metal pole bases, including 1" chamfer. Heavy square nuts under bases TC-2 and larger, shall be used for plumbing pole.
- Work pad** - In unpaved areas, a concrete work pad shall be poured in front of the controller cabinet door and shall be constructed on accordance with standard detail and specification for concrete sidewalk. It shall consist of 5" Class "A" concrete on 6" crushed stone and be included for payment in Item 153C
- Grounding** - All poles except type FA-1 shall be grounded by means of 5/16" K2C20 Burndy or approved equivalent grounding stud capable of accommodating all neutral conductors of the system. Ground wire to be installed in 3/4" plastic conduit.
- In grass areas, bases are to extend 1 1/2" above ground surface. All exposed edges are to be chamfered as directed. In concrete areas, 1/2" pre molded joint filler shall be placed all around, and #10 gauge 6"x6"x2' wide welded wire fabric shall be installed 1" below sidewalk finish grade in areas to be replaced, to the limits directed by the engineer. All work to be included in Item 79  
All excavations for concrete bases shall be dug to the dimensions shown, and the entire excavation filled with concrete. Where, in the opinion the engineer, the excavation is exceptionally large, the base shall be formed with wood or metal, the outside of which shall be completely back filled with "K-Krete".

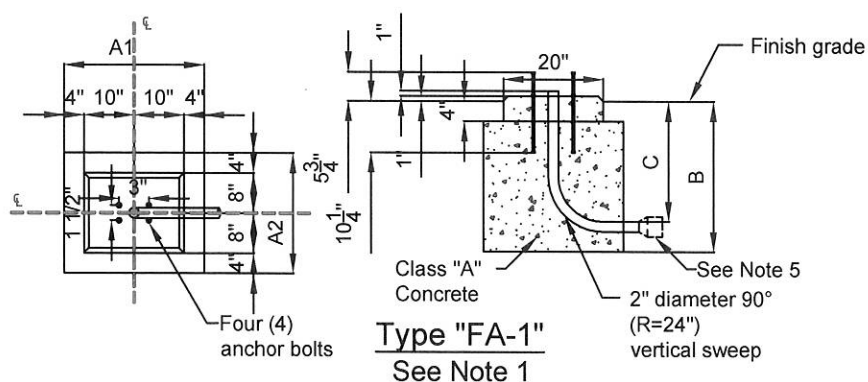
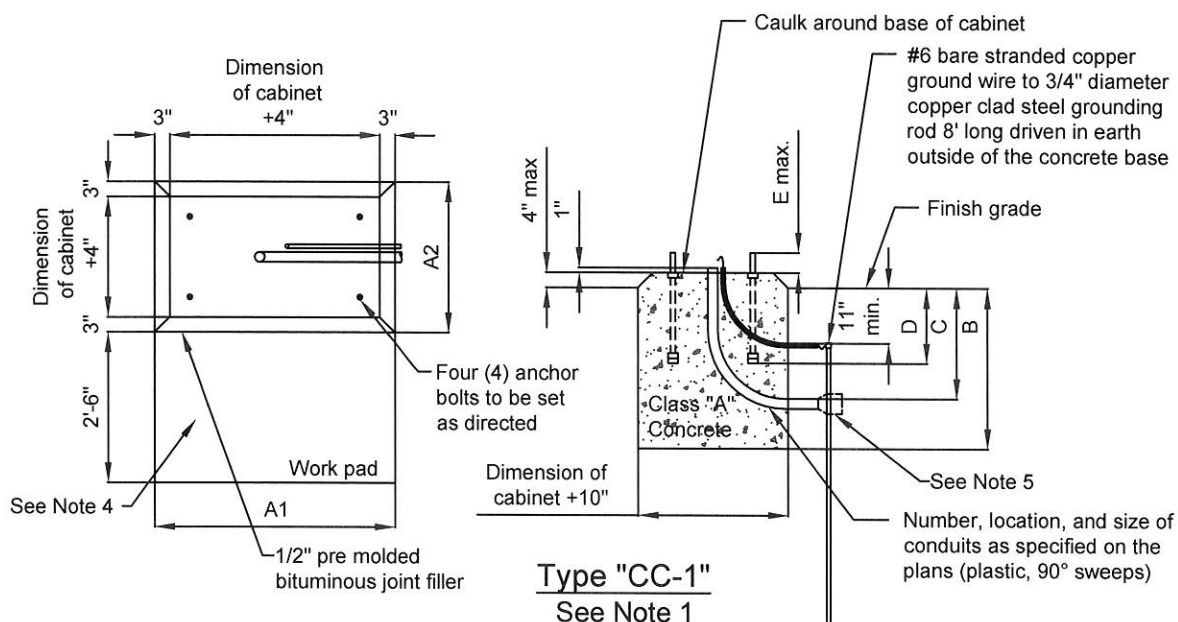
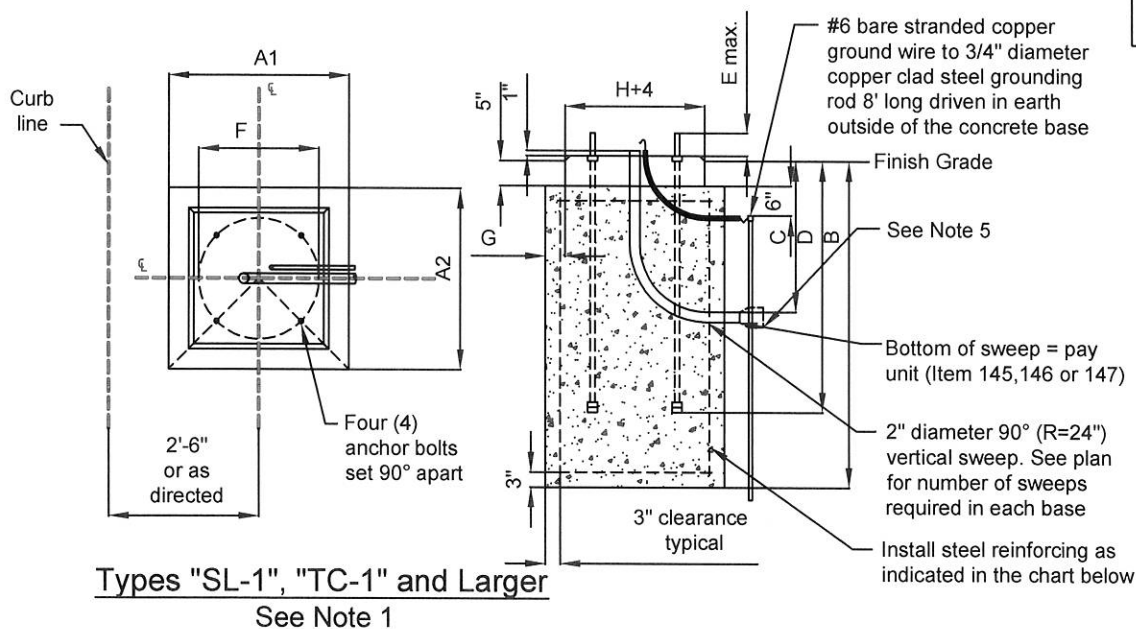


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Standard Construction Detail

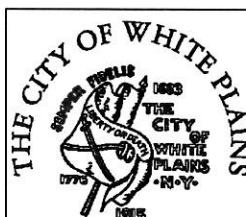
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**Pole and Pedestal Bases**



## NOTES

1. Grout topping to be filled in after pole is set and in a plumb position when fully loaded.
2. Bottom of sweep = pay limit (Item 145, 146, or 147)
3. All concrete will be Class "A"



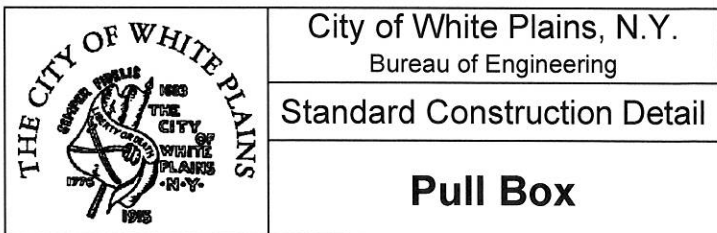
City of White Plains, N.Y.  
Bureau of Engineering

### Standard Construction Detail

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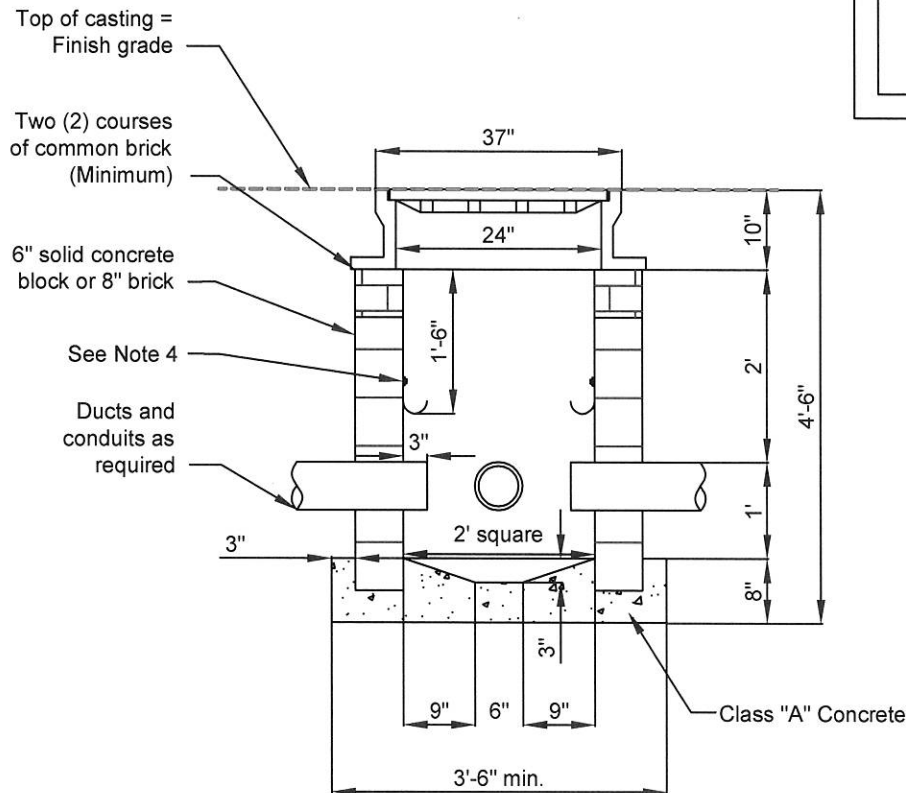
## Pole and Pedestal Bases

1. A wire support hanger shall be installed at the center of each wall face. Hangers shall be similar to catalog number C-149, as manufactured by Steel City or approved equal.
2. Minimum cover over conduit shall be 1'-6".
3. Pull box to be cast with two (2) knockouts on each wall.
4. Pull boxes to be used in walks and grassed areas only.
5. Unless otherwise specified pull boxes shall have letters "TRAFFIC" or "WPSL" cast on the cover as required.
6. The minimum compressive strength of the concrete shall be 4000 PSI
7. The contractor shall have the option to use 8" brick, 6" concrete block, or 4" precast concrete (reinforced). The concrete block and brick pull boxes shall be constructed on a 6" Class "A" concrete base poured in place.
8. The precast concrete structure shall comply with ASTM specifications C478
9. All exposed ducts and conduits shall project 3" beyond the wall. Ducts shall be plugged and conduits shall be threaded and capped with an approved bushing.
10. Casting and cover shall be equal to pattern No. 3062 with pick holes, as manufactured by the Campbell Foundry Co., Harrison N.J.

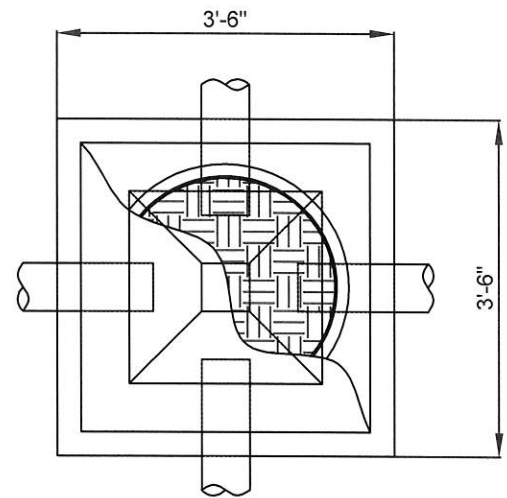


NOTES

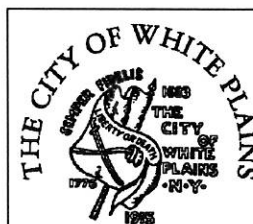
1. Unless otherwise specified Traffic Control shall have letters "TRAFFIC", Fire Alarm shall have letters "WPF", and Street Lighting shall have letters "WPSL" cast on the cover. The cover will have no vent holes.
2. Minimum cover over duct will be 2'-6".
3. All exposed ducts and conduits shall project 3" beyond the wall. Ducts shall be plugged and conduits shall be threaded and capped with an approved bushing.
4. A wire support hanger shall be installed at center of each wall face 2'-6" below finish grade. Hangers shall be similar to catalog number C-149 as manufactured by Steel City or approved equal.
5. Casting and cover shall be equal to Pattern No. 1130 as manufactured by the Campbell Foundry Co., Harrison, N.J., or approved equal.



**TYPICAL SECTION**  
**Splice Box**  
 (Item 151)



**PLAN**



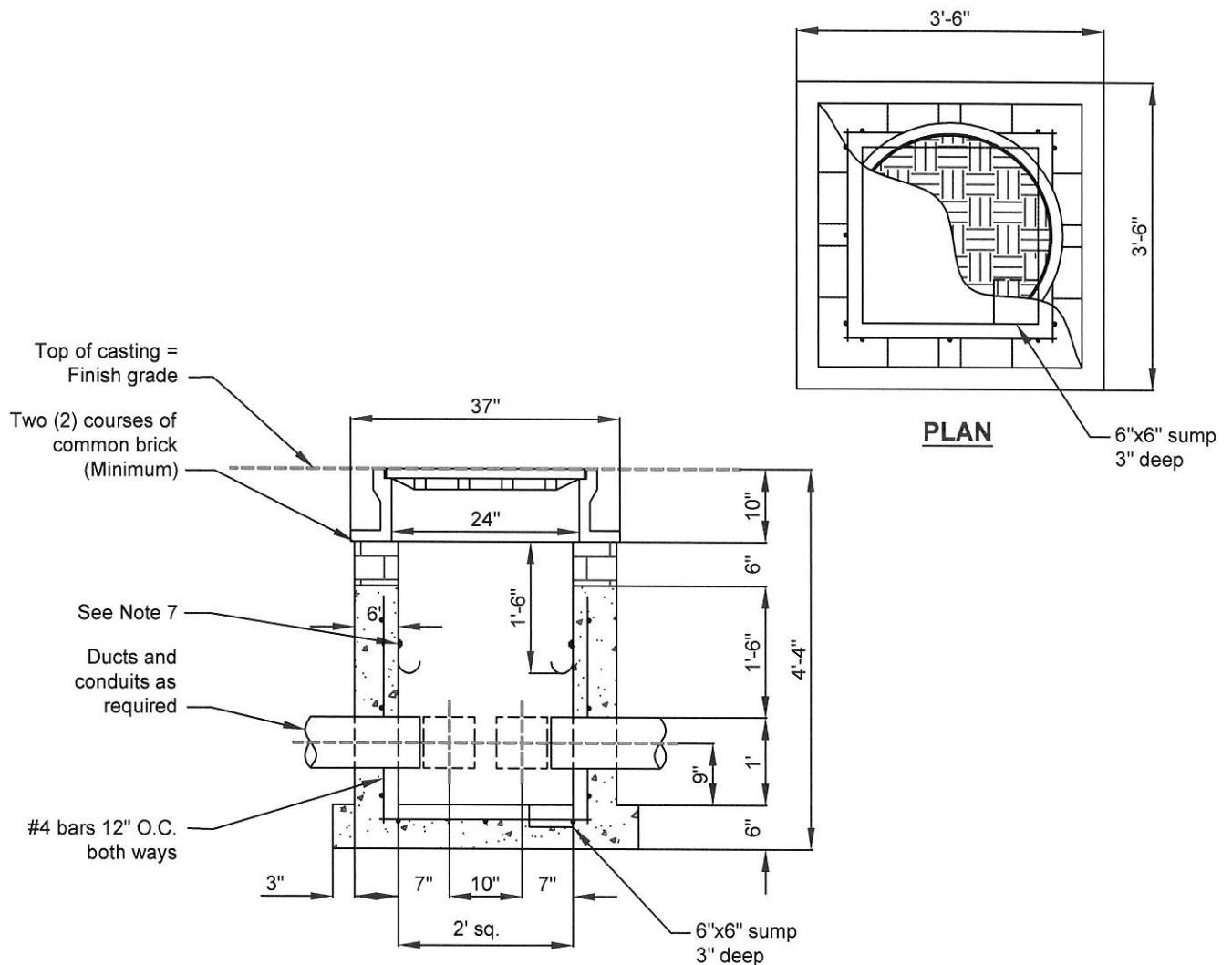
City of White Plains, N.Y.  
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Standard Construction Detail

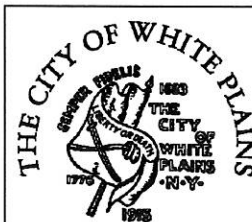
**Splice Box**  
**(Concrete Block)**

NOTES

1. Unless otherwise specified Traffic Control shall have letters "TRAFFIC", Fire Alarm shall have letters "WPF", and Street Lighting shall have letters "WPSL" cast on the cover. The cover will have no vent holes.
2. Minimum cover over duct will be 2'-6".
3. Splice box to be cast with two (2) knockouts on each wall.
4. The minimum compressive strength of the concrete shall be 4000 PSI.
5. The precast concrete structure shall comply with ASTM specifications C478
6. All exposed ducts and conduits shall project 3" beyond the wall. Ducts shall be plugged and conduits shall be threaded and capped with an approved bushing.
7. A wire support hanger shall be installed at center of each wall face 2'-6" below finish grade. Hangers shall be similar to catalog number C-149 as manufactured by Steel City or approved equal.
8. Casting and cover shall be equal to Pattern No.1130 as manufactured by the Campbell Foundry Co., Harrison, N.J., or approved equal.



**TYPICAL SECTION SPLICE BOX**  
(Item 151)

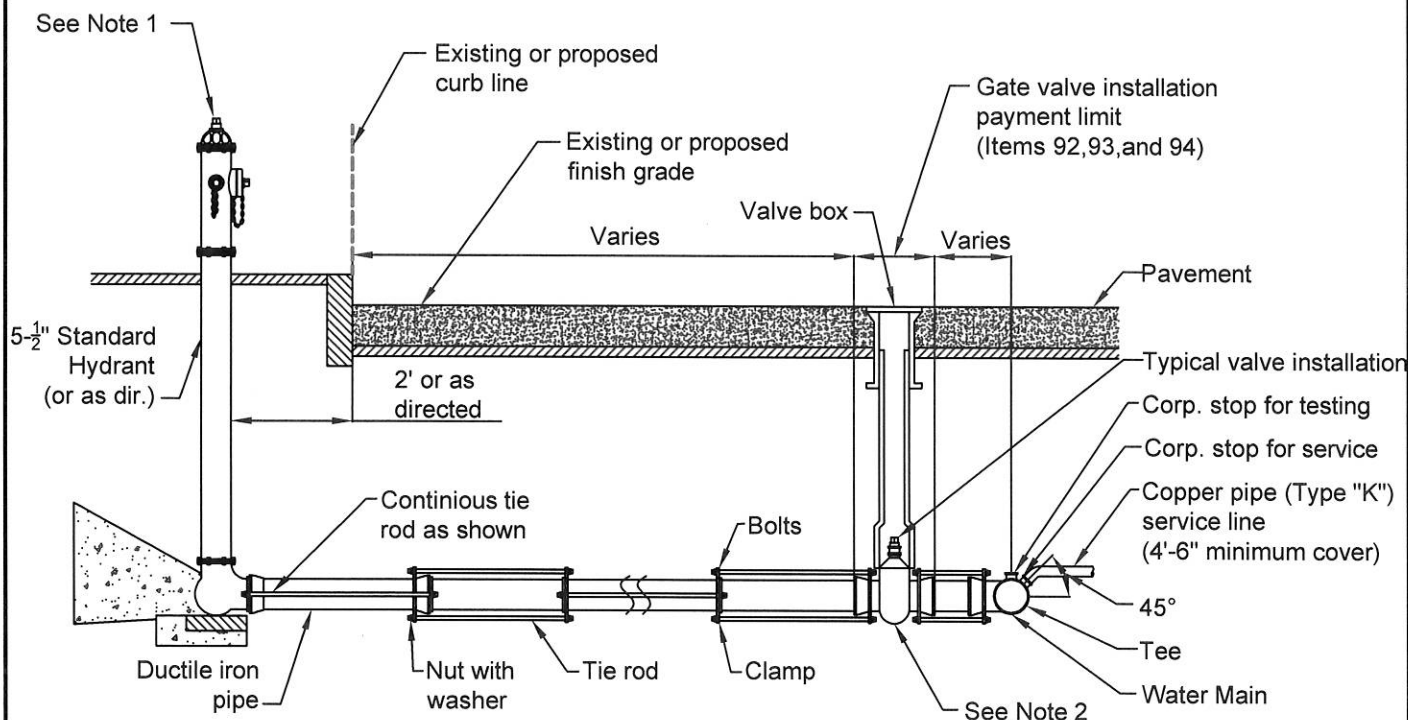


City of White Plains, N.Y.  
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Standard Construction Detail

**Splice Box**  
(Precast Concrete)

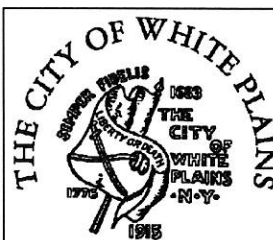




### Typical Detail of Clamp and Tie Rod Installation For Hydrant Leader

#### NOTES

1. Hydrant to be equal to Mueller Super Centurion Catalog No. A-423, opening counterclockwise, 5 1/4" valve and 6" D-150 mechanical joint inlet connection. Nuts & bolts on bonnets and mechanical joints to be stainless steel.
2. Gate valves shall be equal to Mueller Co., style A-2360, opening counterclockwise and shall have stainless steel nuts and bolts.
3. The contractor shall paint the hydrants with two coats of paint where indicated on the detail. The city standard colors shall consist of "Fire Hydrant Red" (No. 1210) and "Yellow" (No. 659) as manufactured by "Rustoleum"
4. Unless otherwise specified hydrants and hydrant leads, valves, bends, plugs, and caps shall be anchored as shown above. After installation, rods and clamps should be thoroughly covered with asphalt or other acceptable corrosion retarding material. In general, the method and types of material required to install clamps and tie rods shall be in accordance with the latest National Fire Protection Agency standards. No direct payment will be made, payment shall be included under item bid.
5. The contractor may substitute a concrete slab in place of the flagstone as shown, provided that the concrete is allowed to set up at least 24 hours prior to installing the hydrant.
6. Refer to sheets SD-31 and SD-32 for rodding and thrust block details
7. Hydrant's D.I.P. leads shall be installed level.

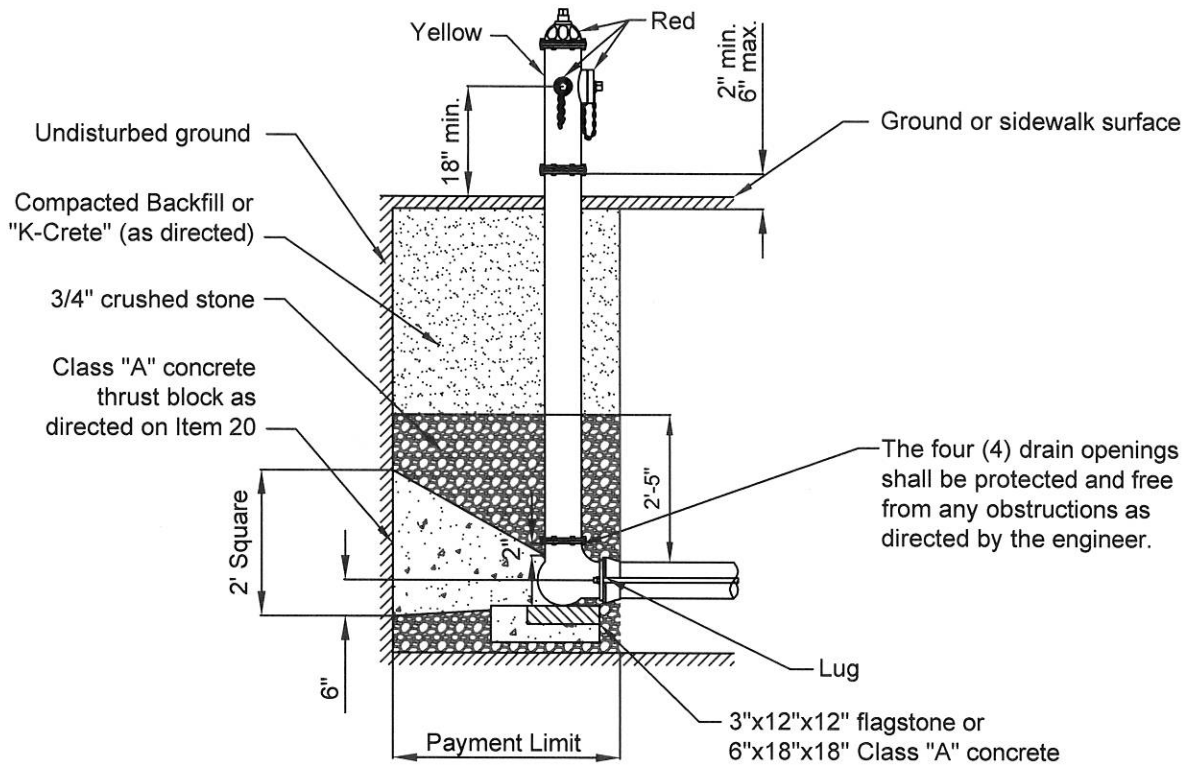


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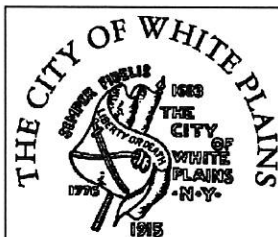
Standard Construction Detail

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Water Appurtenances



| Pipe | Clamps       | Rods | Bolts | Steel Washer |
|------|--------------|------|-------|--------------|
| 6"   | 1/2"x2"      | 3/4" | 5/8"  | 1/2"x3"      |
| 8"   | 5/8"x2- 1/2" | 3/4" | 5/8"  | 1/2"x3"      |
| 10"  | 5/8"x2- 1/2" | 7/8" | 3/4"  | 1/2"x3"      |
| 12"  | 5/8"x3"      | 1"   | 7/8"  | 1/2"x3- 1/2" |

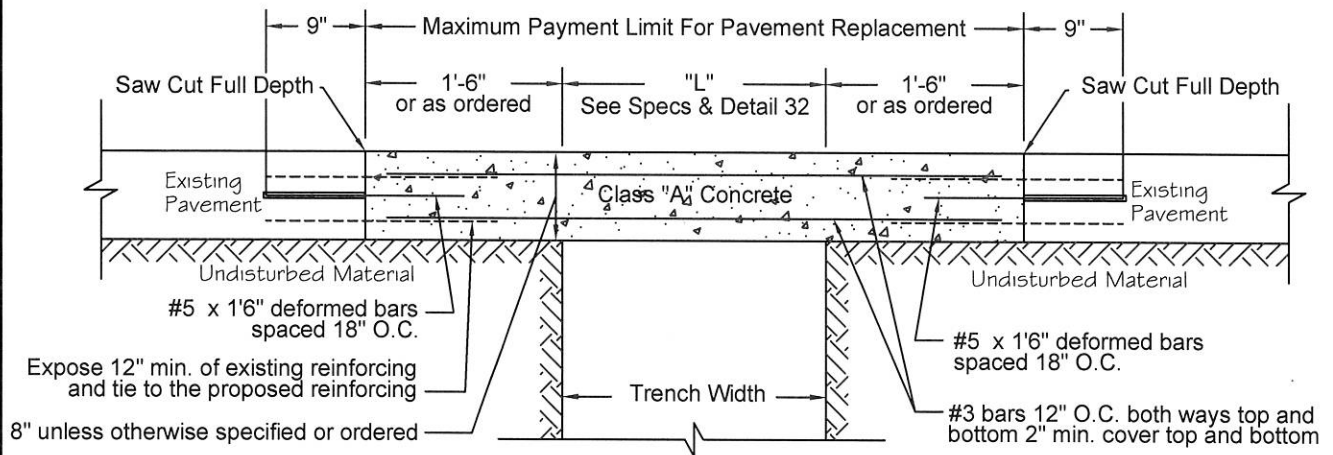


City of White Plains, N.Y.  
Bureau of Engineering

Standard Construction Detail

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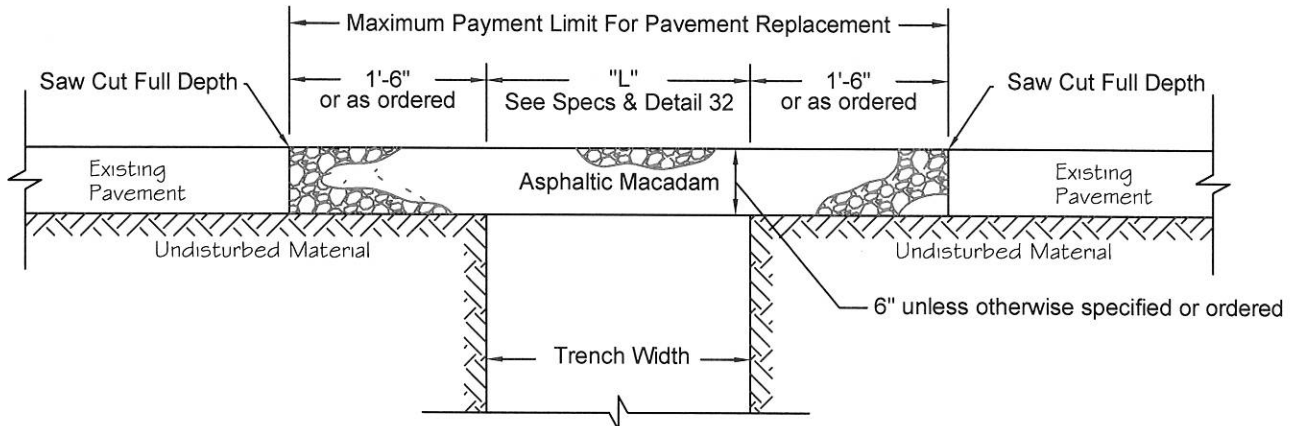
**Water Appurtenances**



### CONCRETE PAVEMENT REPLACEMENT

(Item 56)

SCALE = N.T.S.

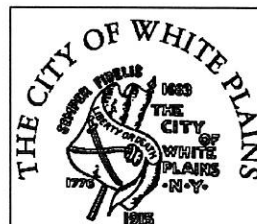


### ASPHALTIC MACADAM PAVEMENT REPLACEMENT

(Item 55)

SCALE = N.T.S.

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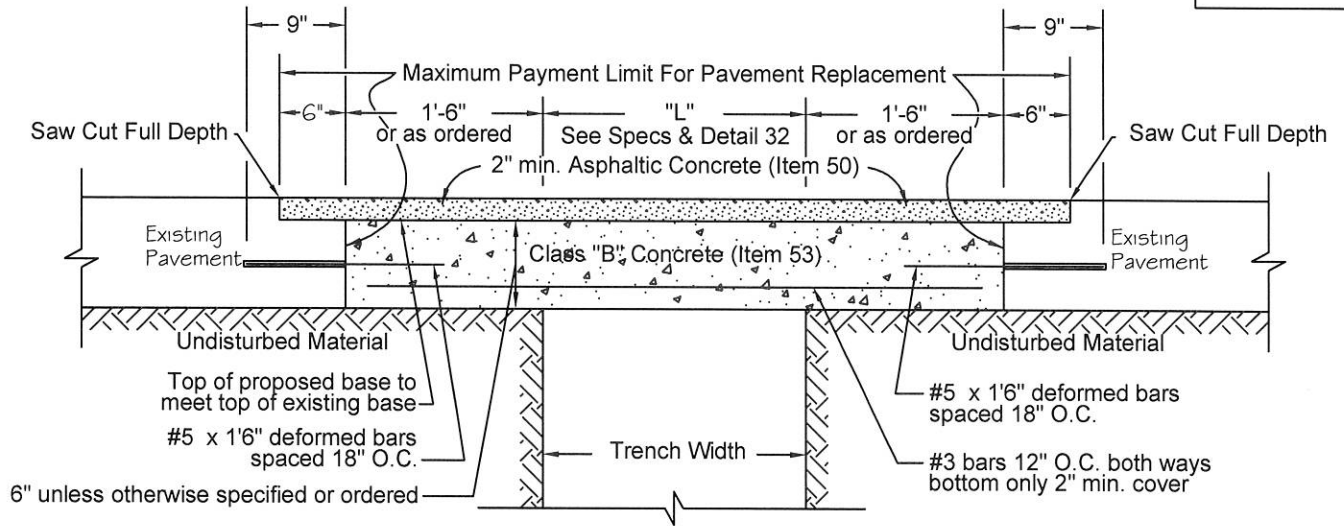
City of White Plains, N.Y.  
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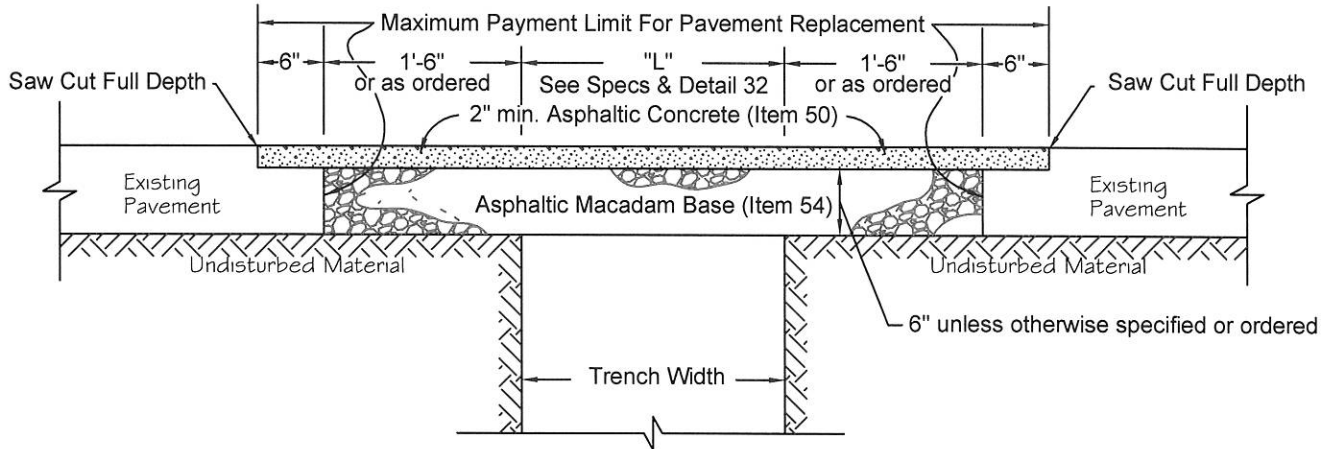
Pavement Replacements

Revised: 05-09-07



### **ASPHALTIC CONCRETE ON CONCRETE BASE PAVEMENT REPLACEMENT**

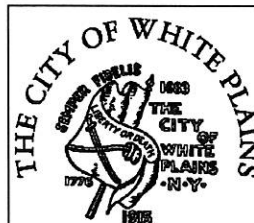
(Items 50 & 53)  
SCALE = N.T.S.



### **ASPHALTIC CONCRETE ON ASPHALTIC MACADAM BASE PAVEMENT REPLACEMENT**

(Items 50 & 54)  
SCALE = N.T.S.

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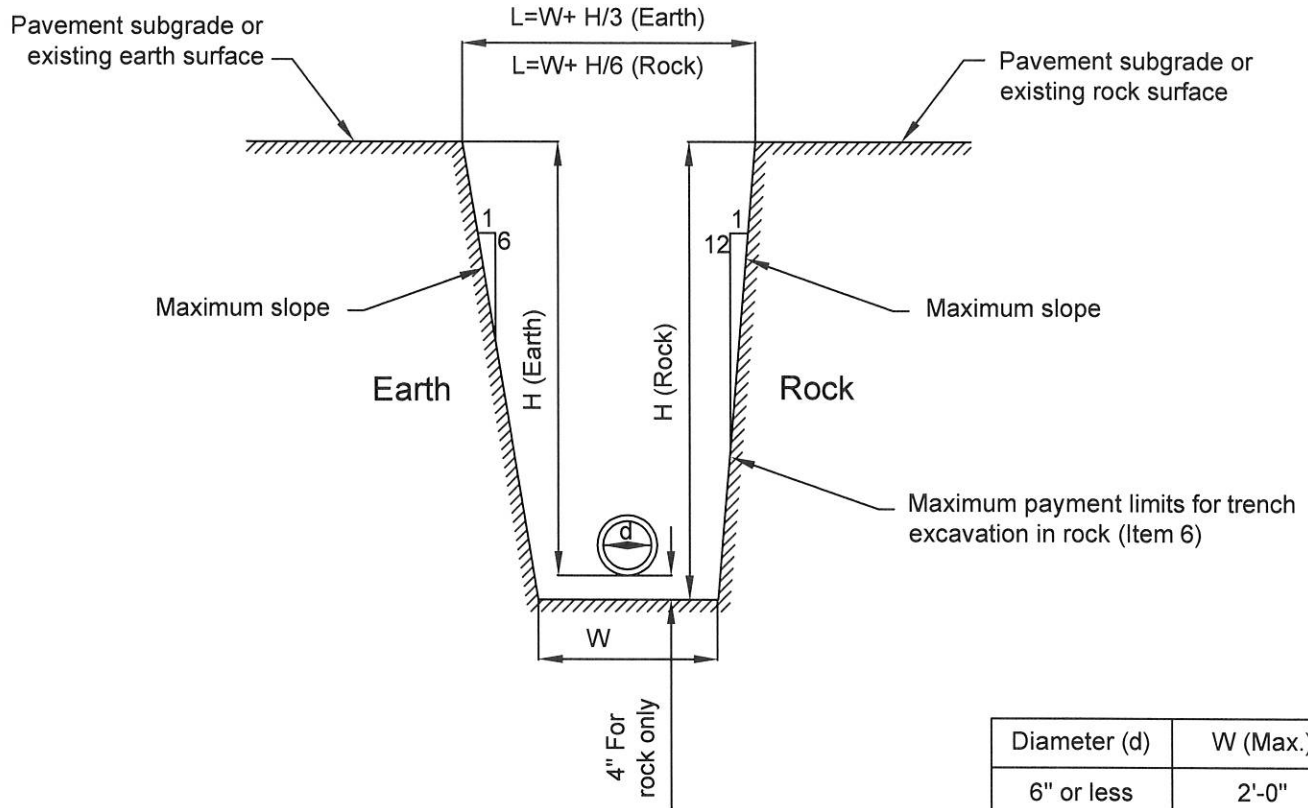


City of White Plains, N.Y.  
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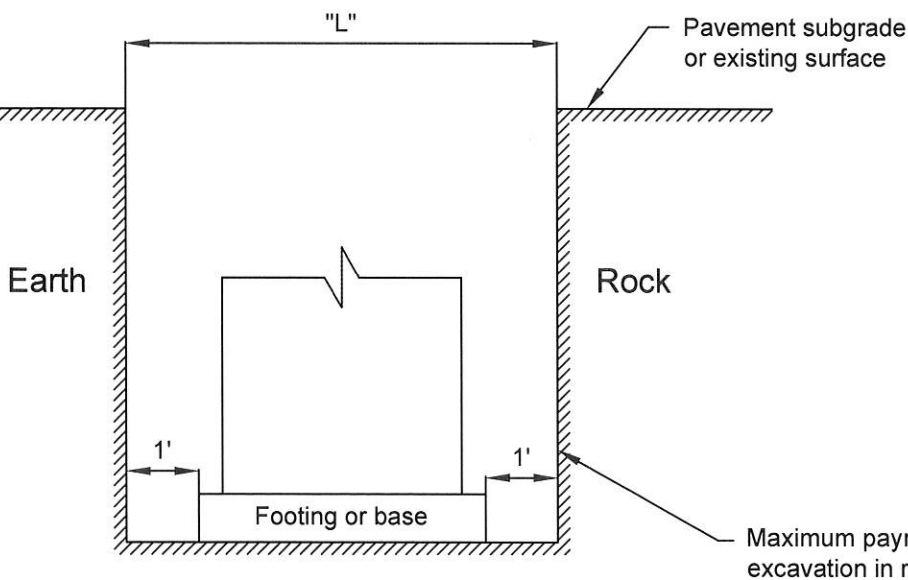
Page 2 of 2

Pavement Replacements

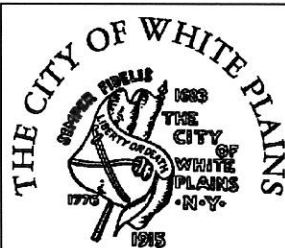


### Pipe or Conduit

| Diameter (d) | W (Max.) |
|--------------|----------|
| 6" or less   | 2'-0"    |
| 8"           | 2'-6"    |
| 10"-12"      | 3'-0"    |
| 14"-18"      | 3'-6"    |
| 20"-30"      | 4'-0"    |
| 36"          | 4'-6"    |
| 42"          | 5'-6"    |
| 48"          | 6'-0"    |
| 54"          | 6'-6"    |
| 60"          | 7'-0"    |
| 66"          | 7'-6"    |
| 72"          | 8'-0"    |
| 78"          | 9'-0"    |
| 84"          | 9'-6"    |
| 90"          | 10'-0"   |
| 96"          | 10'-6"   |



### Structure

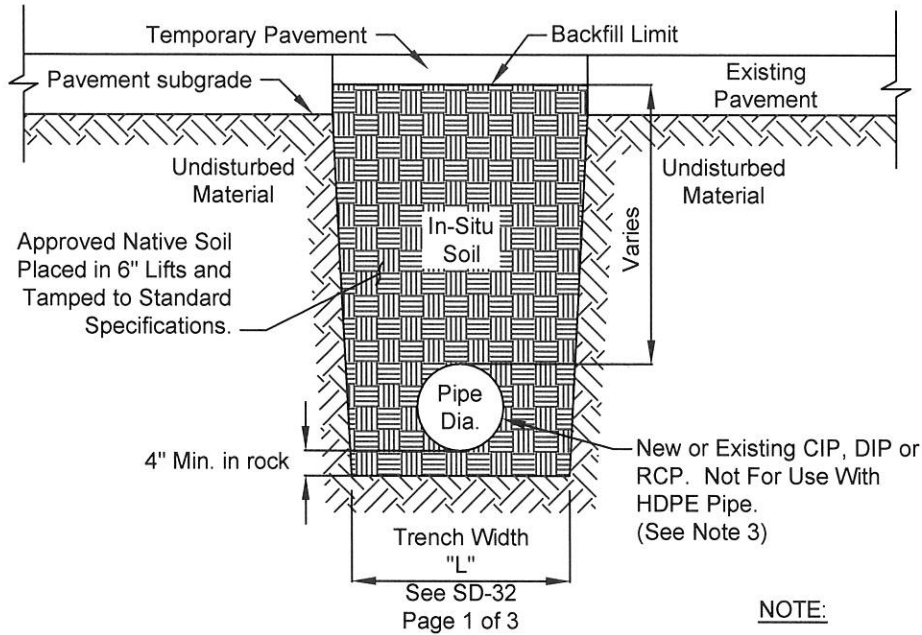


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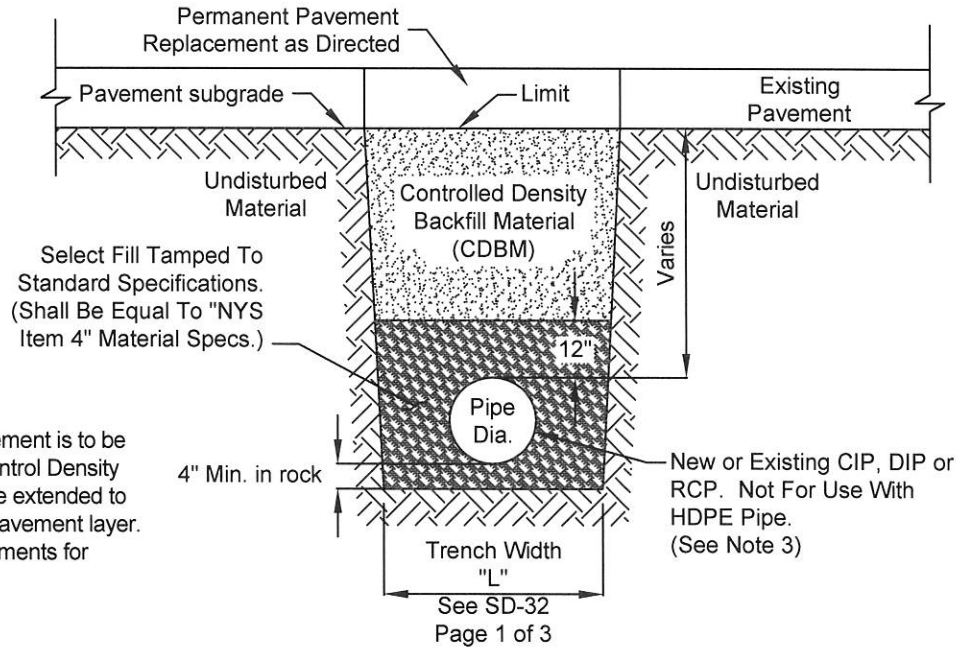
**Trench Excavation**



**Pipe Trench Backfill  
(Utilizing In-Situ Soil)**  
Scale = N.T.S.

**NOTE:**

The use of In-Situ soil as trench backfill requires the placement and maintenance of Temporary Pavement. Refer to Contract Documents for additional information.

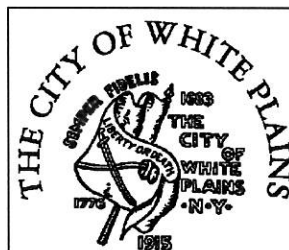
**NOTE:**

When Temporary Pavement is to be placed over CDBM, Control Density Backfill Material shall be extended to bottom of Temporary Pavement layer. Refer to Contract Documents for additional information.

**GENERAL NOTES:**

1. See Contract Documents for the type of trench backfill required.
2. No direct payment to be made for Select Fill or Controlled Density Backfill Material. Cost to be included in the various Items bid. (See Contract Documents.)
3. For HDPE pipe refer to "Trench Backfill", Page 3 of 3.

**Pipe Trench Backfill  
(Utilizing CDBM & Select Fill)**  
Scale = N.T.S.



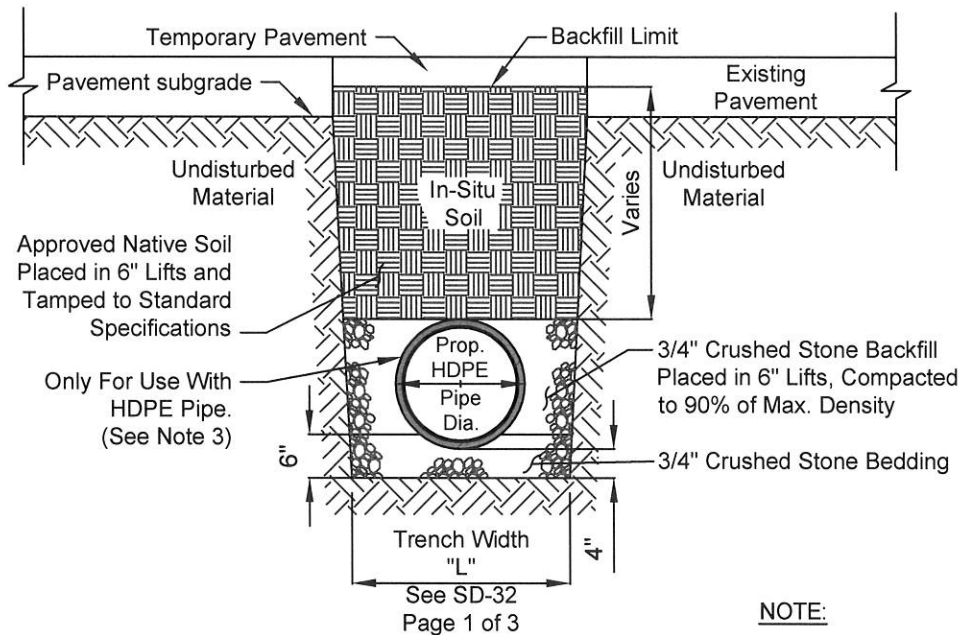
City of White Plains, N.Y.  
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**Trench Backfill**

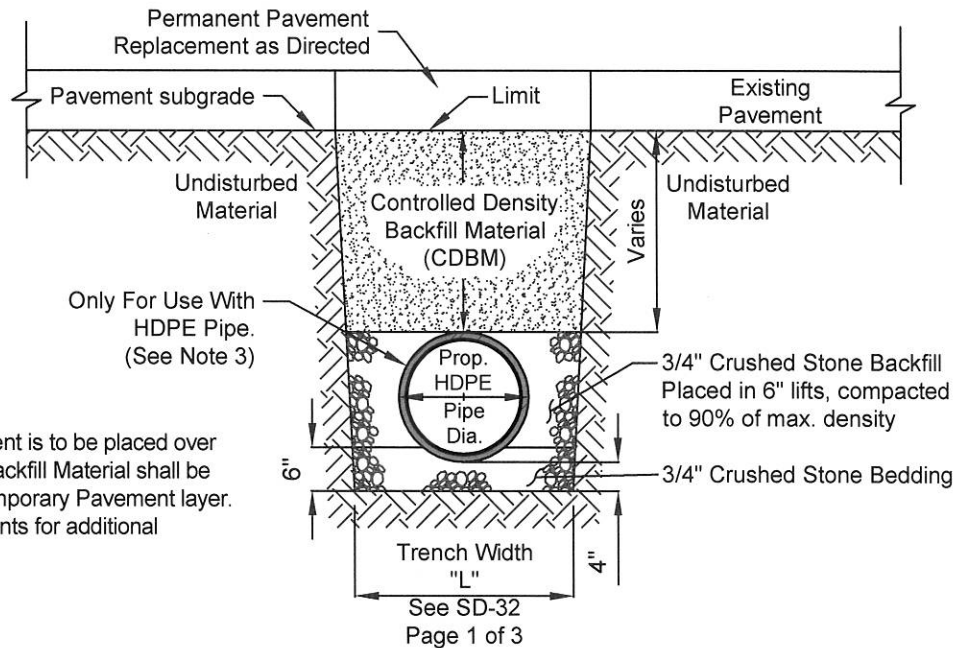


**NOTE:**

The use of In-Situ soil as trench backfill requires the placement and maintenance of Temporary Pavement. Refer to Contract Documents for additional information.

### HDPE Pipe Trench Backfill (Utilizing In-Situ Soil)

Scale = N.T.S.

**NOTE:**

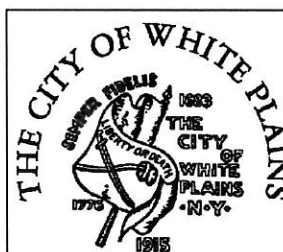
When Temporary Pavement is to be placed over CDBM, Control Density Backfill Material shall be extended to bottom of Temporary Pavement layer. Refer to Contract Documents for additional information.

**GENERAL NOTES:**

1. See Contract Documents for the type of trench backfill required.
2. No direct payment to be made for Crushed Stone or Controlled Density Backfill Material. Cost to be included in the various Items bid. (See Contract Documents)
3. For pipes other than HDPE pipe refer to "Trench Backfill", Page 2 of 3.

### HDPE Pipe Trench Backfill (Utilizing CDBM & Select Fill)

Scale = N.T.S.



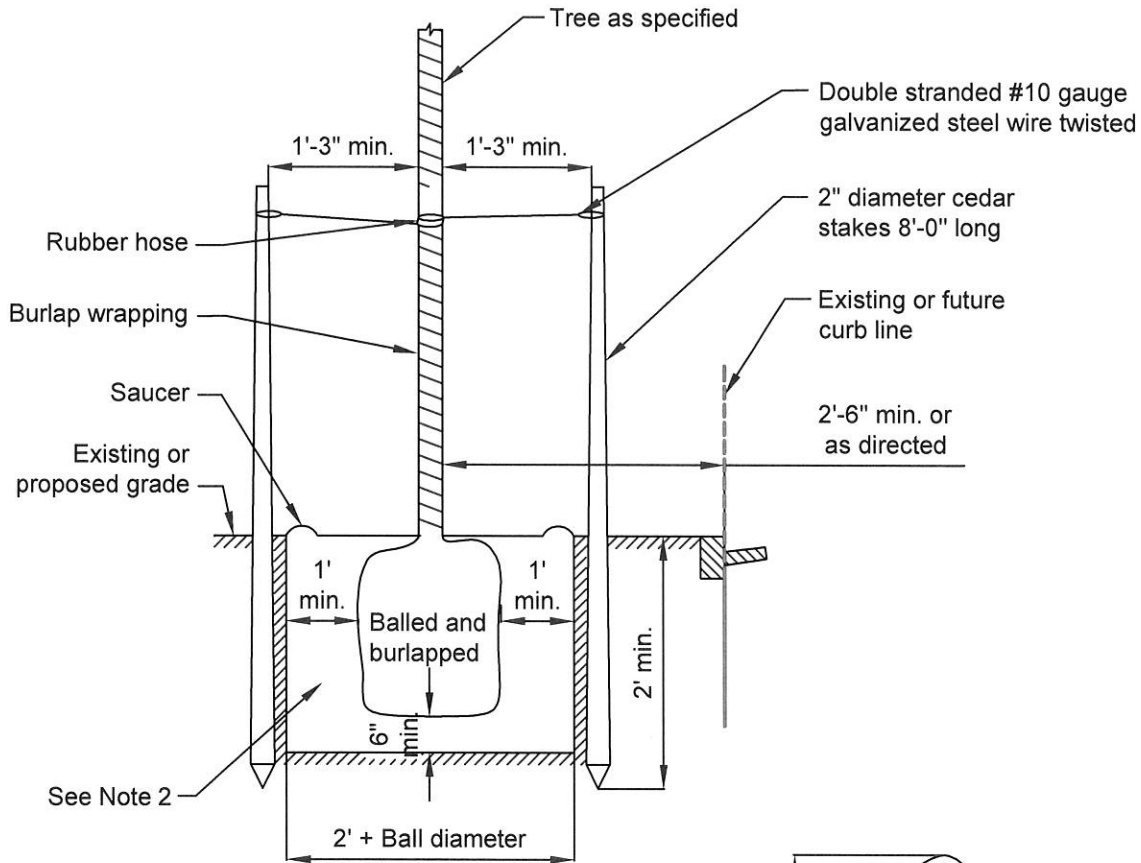
City of White Plains, N.Y.  
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**Trench Backfill**

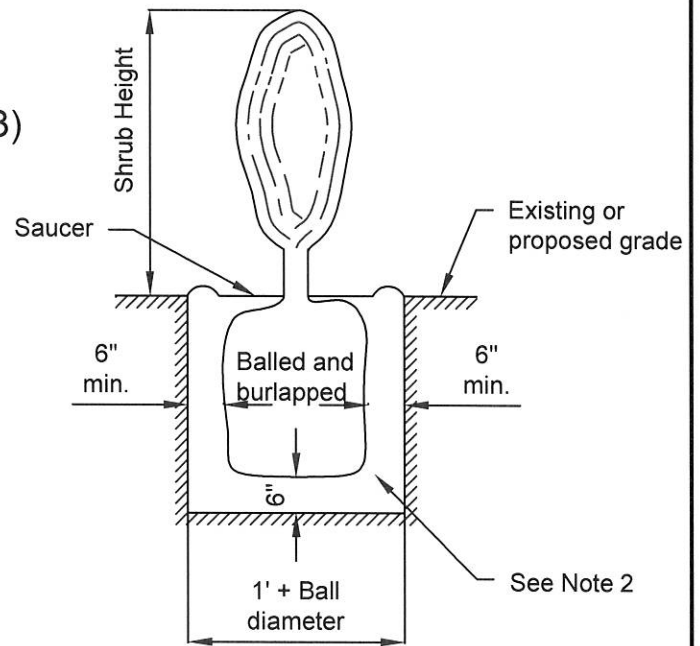




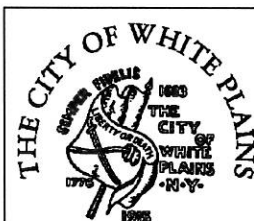
### **Tree Planting** (Items 200, 202, and 203)

#### NOTES

1. The furnishing and planting of trees and shrubs shall be performed in accordance with the specifications entitled, "Landscaping"
2. Fill excavation with a mixture, 20% Peet moss, 80% top soil, and approved organic fertilizer



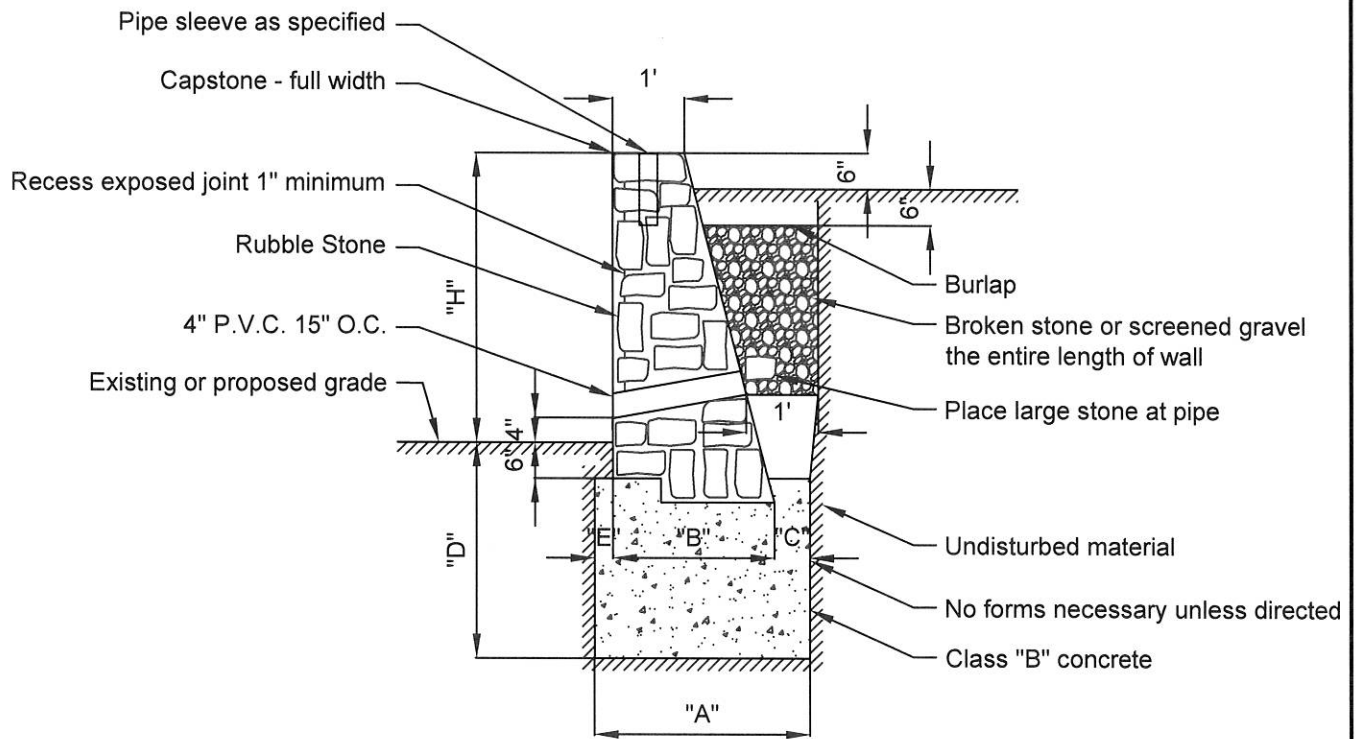
### **Shrub Planting** (Items 197, 198, and 199)



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Standard Construction Detail

**Tree and Shrub  
Planting**



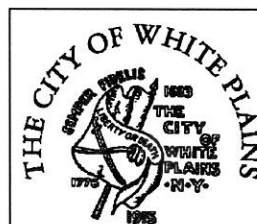
**Concrete Foundation For Wall**  
(Item 23)

**Rubble Stone Masonry**  
(Item 27)

#### NOTES

1. Where the height (H) of the wall is less than 2'-0", no weep holes or stone for drainage will be required.
2. This wall shall be constructed for general use only. No provision has been made for a surcharge load.

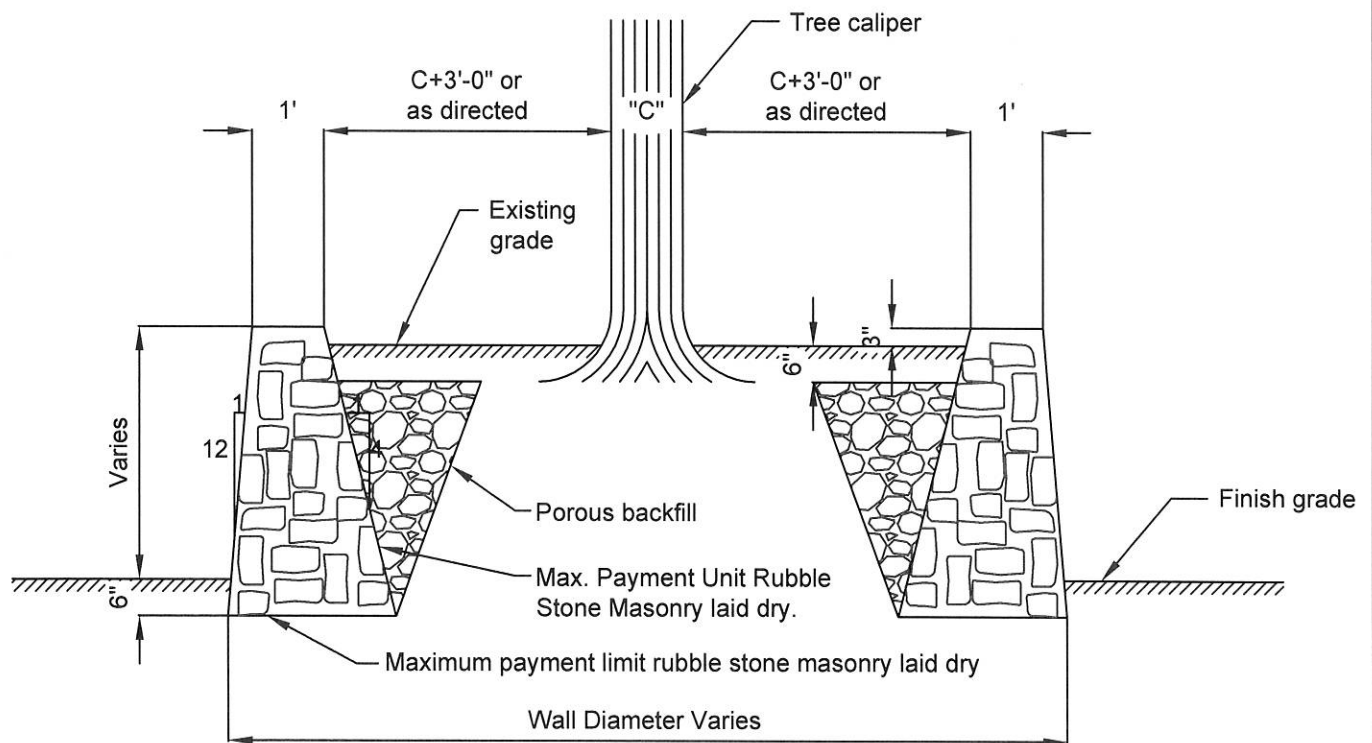
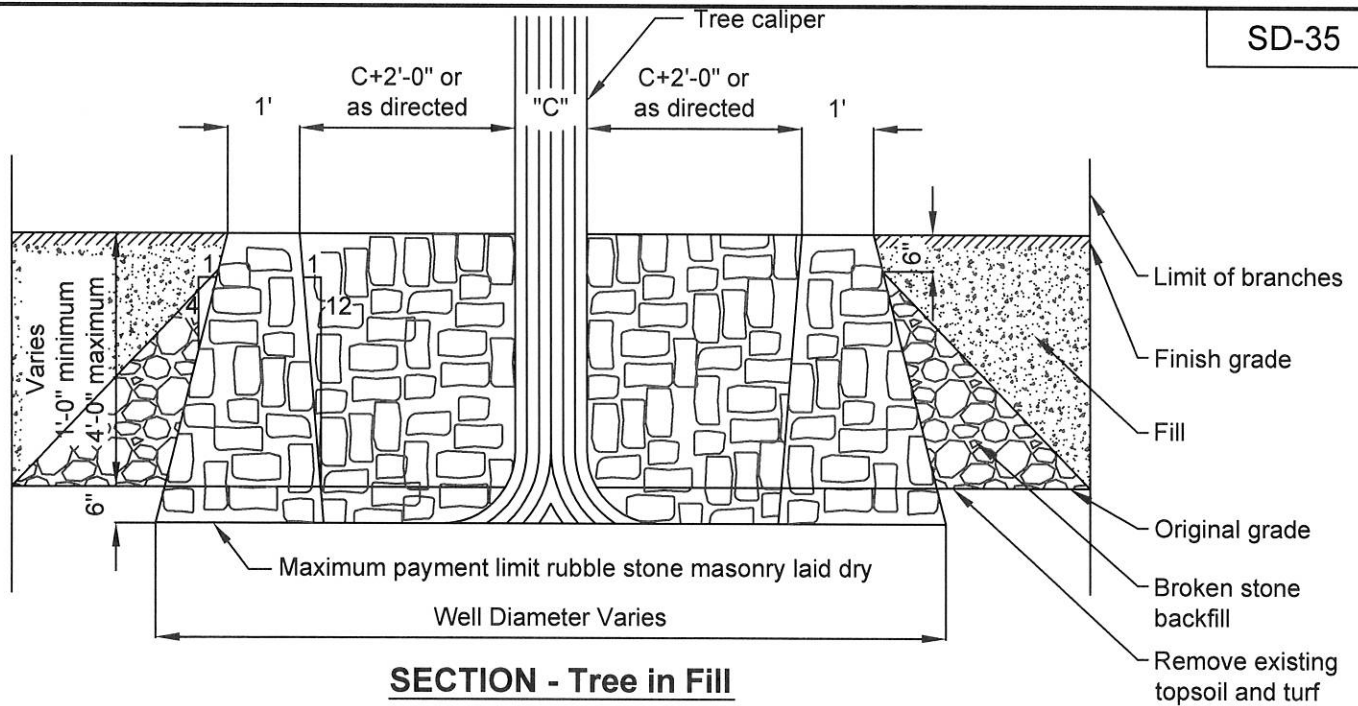
| MAXIMUM PAYMENT LIMIT |       |        |     |       |     |
|-----------------------|-------|--------|-----|-------|-----|
| H(Ft)                 | "A"   | "B"    | "C" | "D"   | "E" |
| 1                     | 1'-0" | 1'-5"  | 4"  | 2'-0" | 3"  |
| 2                     | 2'-3" | 1'-8"  | 4"  | 2'-0" | 3"  |
| 3                     | 2'-8" | 1'-10" | 7"  | 3'-0" | 3"  |
| 4                     | 3'-0" | 2'-2"  | 7"  | 3'-0" | 3"  |
| 5                     | 3'-3" | 2'-5"  | 7"  | 3'-0" | 3"  |
| 6                     | 3'-6" | 2'-8"  | 7"  | 3'-0" | 3"  |
| 7                     | 4'-8" | 3'-6"  | 10" | 3'-0" | 4"  |
| 8                     | 5'-0" | 3'-10" | 10" | 3'-0" | 4"  |
| 9                     | 5'-4" | 4'-2"  | 10" | 3'-0" | 4"  |
| 10                    | 5'-8" | 4'-6"  | 10" | 3'-0" | 4"  |



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Standard Construction Detail

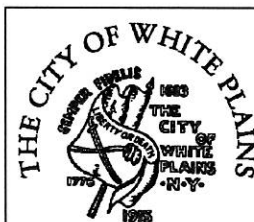
**Rubble Stone Masonry**  
**Retaining Wall**



**Rubble Stone Masonry For Tree Well And Wall**  
(Item 29)

**NOTES**

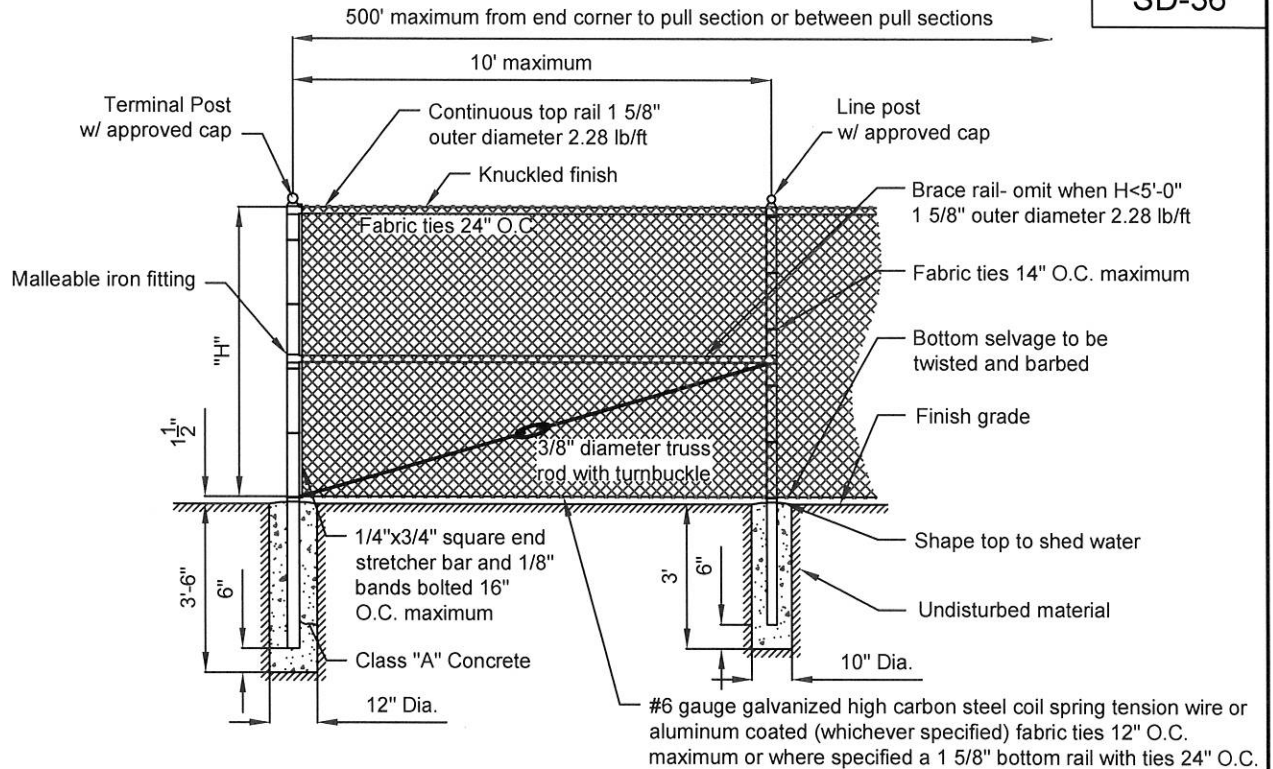
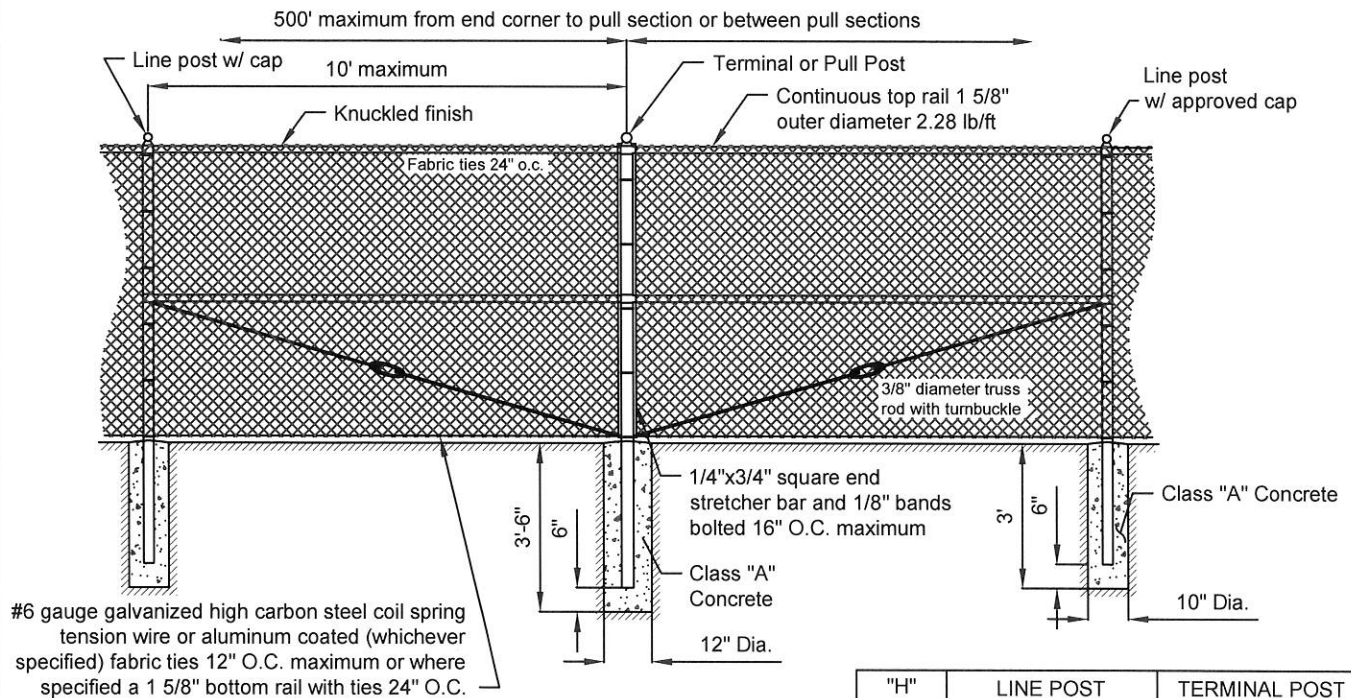
1. The contractor shall protect all exposed and disturbed root structure as directed until the wells are constructed.
2. The contractor may lay rubble stone available from the job site, provided that the stone meets the approval of the engineer.



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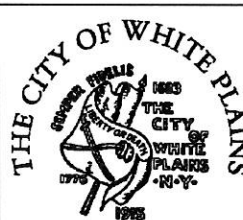
Standard Construction Detail

**Rubble Stone Masonry  
Tree Well and Wall**

**Corner or Terminal Section****Pull Section****Chain Link Fence  
(Item 224)****NOTES**

1. Fence fabric to be 6 Gauge, vinyl coated (BLACK), 2"x2" steel mesh.
2. All posts, rails, and accessories shall be vinyl coated (BLACK) per specifications.
3. Chain link fence shall include barbed wire only where specified.
4. Terminal posts shall consist of end, corner, angle, and pull posts.
5. Gate posts shall be specified and included under Item 225, entitled "CHAIN LINK GATES". All gates shall be fully welded.
6. Rock excavation for post holes shall be paid for under Item 7.
7. Concrete will be Class "A"

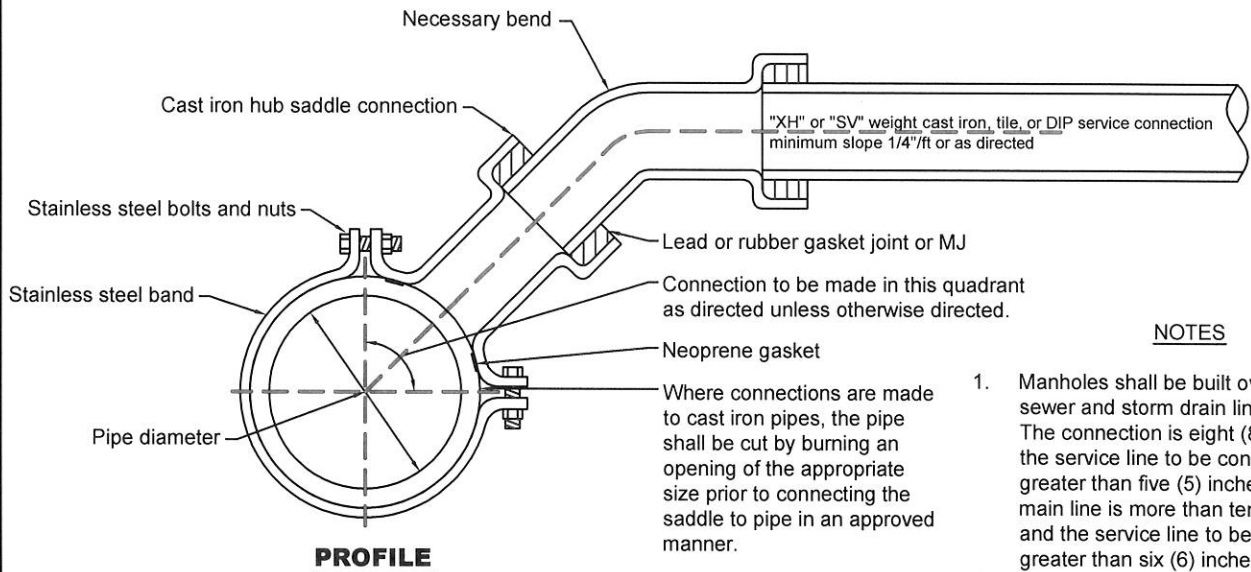
| "H"<br>(ft) | LINE POST<br>See Note 2             | TERMINAL POST<br>See Note 2         |
|-------------|-------------------------------------|-------------------------------------|
| 5' or less  | 2" outer diameter<br>2.72 lb/ft     | 2 1/2" outer diameter<br>3.65 lb/ft |
| >5'         | 2 1/2" outer diameter<br>3.65 lb/ft | 3" outer diameter<br>5.79 lb/ft     |



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Standard Construction Detail

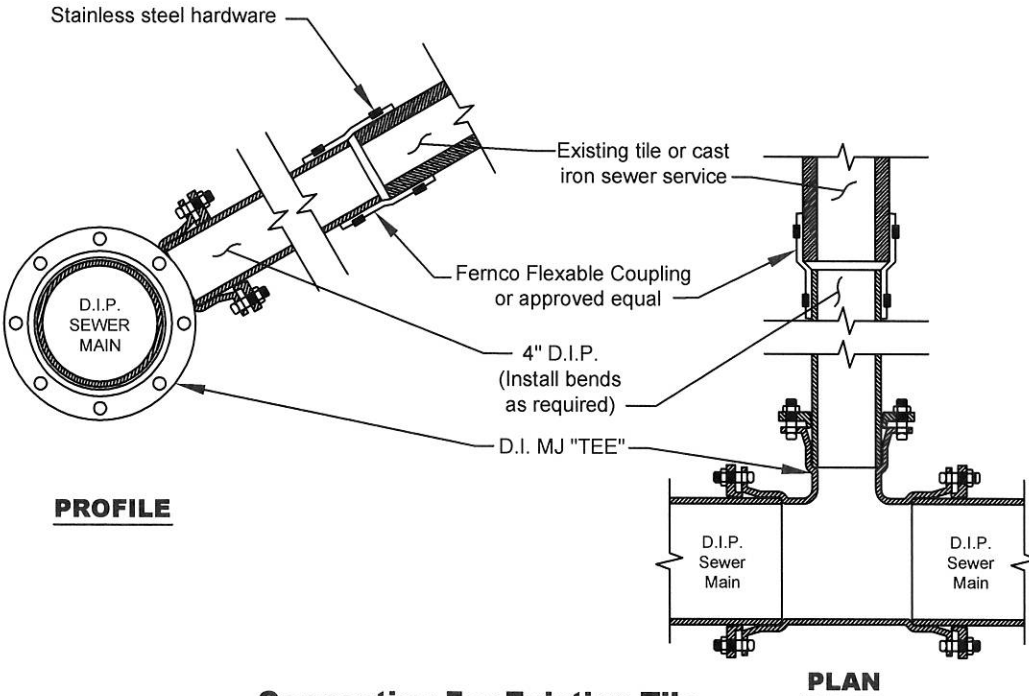
**Chain Link Fence**



**Saddle Connection to Existing Cast Iron,  
Ductile Iron, Tile, or Concrete Pipe  
(Item 134)**

**NOTES**

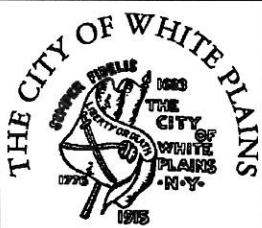
1. Manholes shall be built over sanitary sewer and storm drain lines when:  
The connection is eight (8) inches and the service line to be connected is greater than five (5) inches or when the main line is more than ten (10) inches and the service line to be connected is greater than six (6) inches.
2. The connection shall be made by a plumber licensed by the City of White Plains and all work approved by the Bureau of Sewers.



**Connection For Existing Tile  
Or Cast Iron Service**

**NOTES**

1. D.I. MJ "Wyes" may be used in lieu of "TEES" if field conditions permit it and with prior approval of the Engineer.
2. Refer to contract drawing for trench backfill details.
3. Fernco flexible couplings inner diameter shall match the outer diameter of the host pipe.
4. Fernco flexible coupling shall have stainless steel hardware.

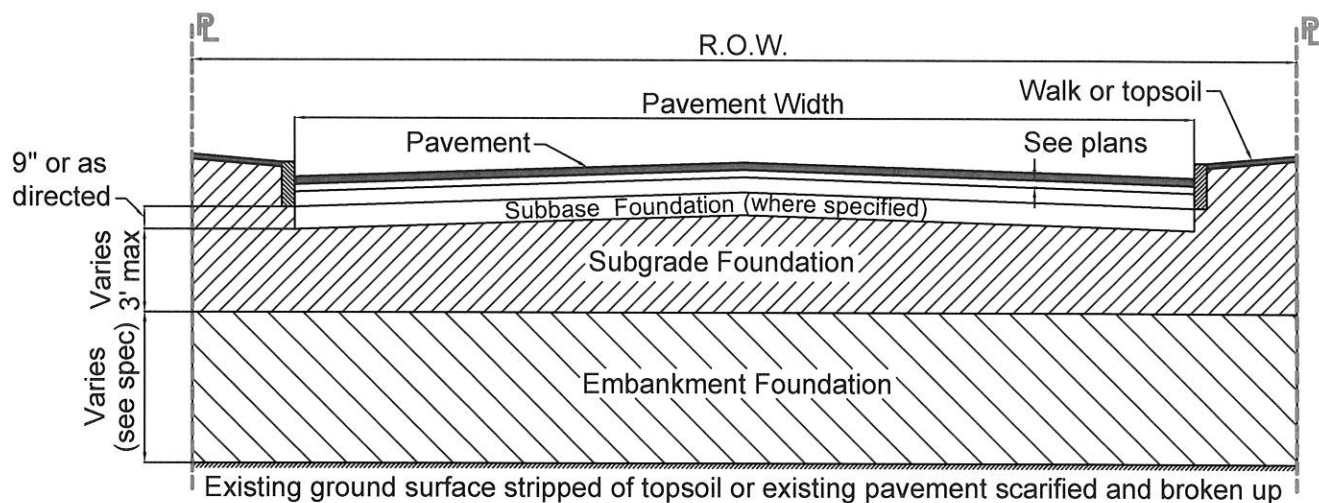


City of White Plains, N.Y.  
Bureau of Engineering

Standard Construction Detail

**Sanitary Sewer Service  
to Main Connection**

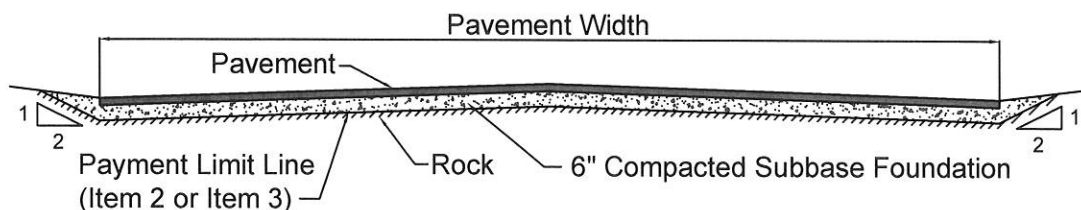




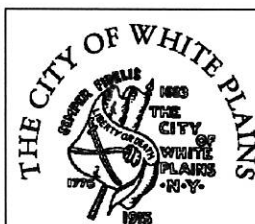
**Typical Section**

**NOTES**

1. The contractor shall construct the pavement as shown on the contract plans, including a subbase foundation where specified. The subbase shall consist of a select fill material as described in the specifications and shall be paid for under Item 12, entitled "Select Fill".
2. The subgrade foundation shall consist of subgrade fill as described in the specifications. Unless there is a deficiency in subgrade material on the site(s) under this contract, no direct payment shall be made, payment shall be included under the unit price bid for Item 2 or Item 3, entitled "Unclassified Excavation" and "Earth Excavation", respectively. Where there is a deficiency of material, the payment shall be made under Item 13, entitled "Subgrade Fill".
3. The embankment foundation shall consist of embankment fill as described in the specifications. The method of payment shall be as described above for subgrade foundation, except where there is a deficiency of material, payment shall be made under Item 14, entitled "Embankment Fill".



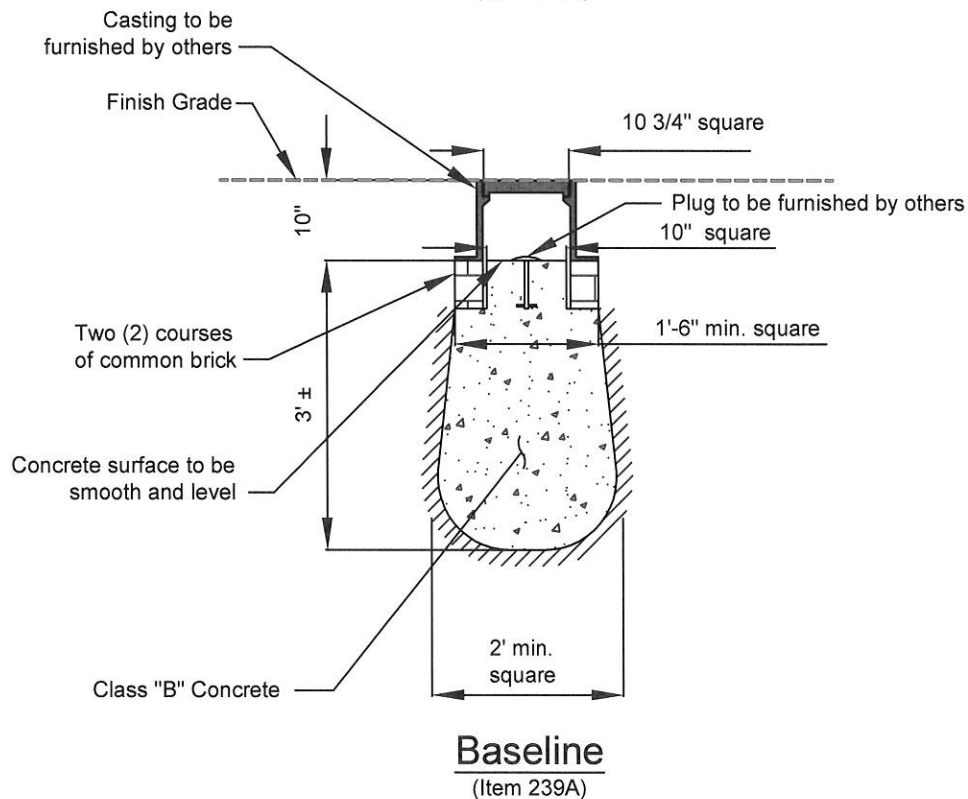
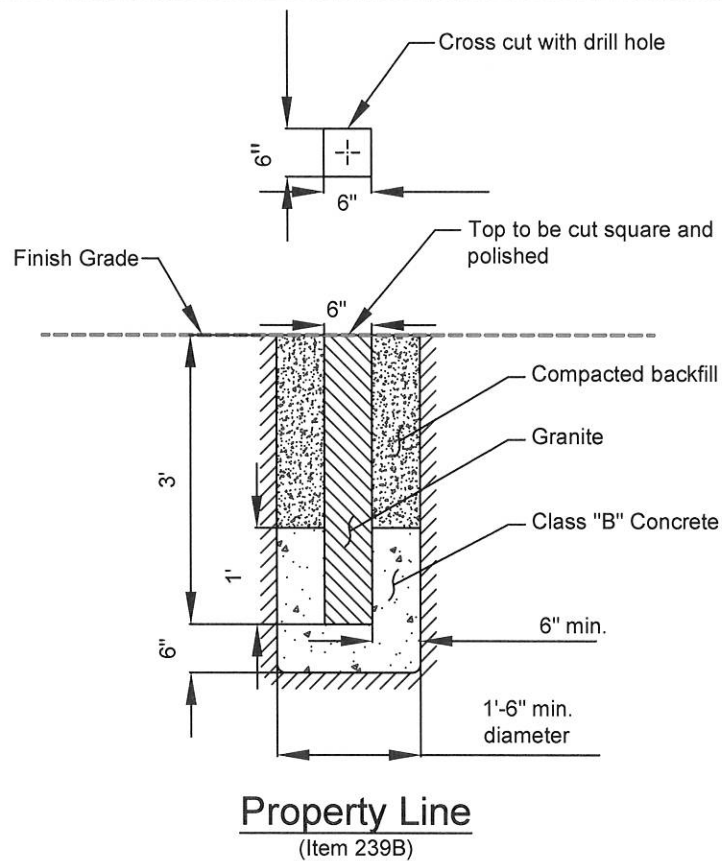
**Typical Pavement Section In Rock**



City of White Plains, N.Y.  
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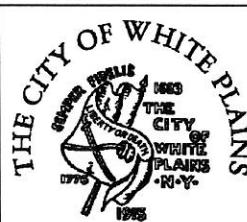
Standard Construction Detail

**Earthwork  
Foundations**



## NOTES

1. Unless otherwise specified, monuments are to be set by a surveyor licensed by the State of New York in accordance with the specifications.
2. All concrete will be Class "B" poured against undisturbed material.



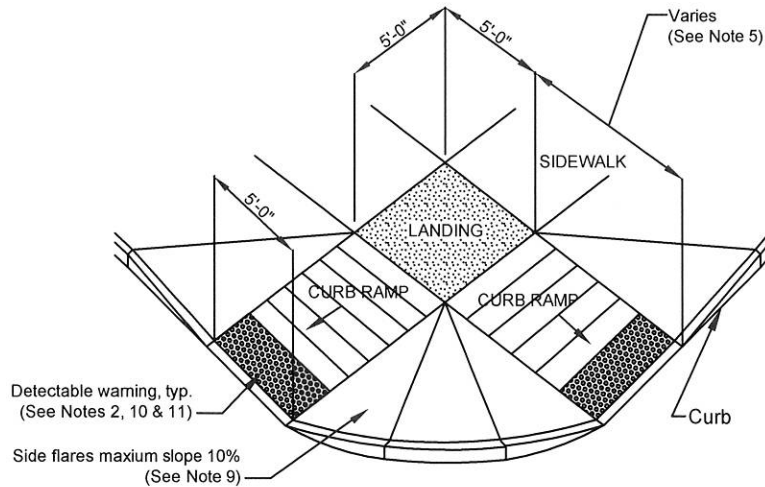
City of White Plains, N.Y.

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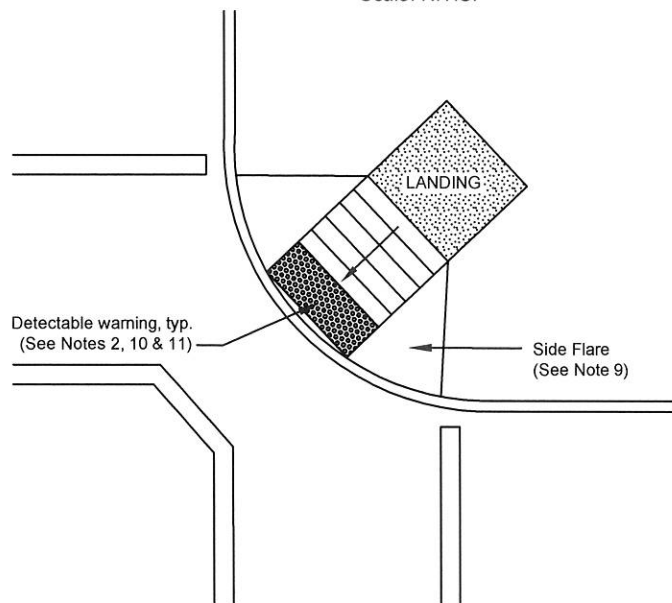
### Standard Construction Detail

## Survey Monuments



**Curb Ramp With Side Flares Typical Dimensioning**

Scale: N.T.S.

**Curb Ramp Configuration**

Scale: N.T.S.

**NOTES****LANDINGS**

12. Landings shall have a Minimum clear dimension of a 5'-0" by 5'-0".
13. The Running and Crossing Slopes on Landings at intersections is 1 : 50 (2%) Maximum. The Running and Crossing Slopes at Midblock Crossings may be warped to meet street grades.
14. The contractor's attention is directed to SD-22 for the construction details of the walk.
15. The location of the ramps shall be established in the field by the engineer.
16. Payment for the construction of the ramps as shown shall be included in the unit price bid for Items 79 and 80.
17. Payment for removal, resetting, and/or replacing the existing curb shall be paid under Items 64 thru 72.
18. Where directed concrete curb shall be made integral with concrete sidewalk. Concrete curb shall be included under Item 79A.
19. Pedestrian ramps to be located between crosswalk lines.
20. Exact locations of pedestrian ramps may vary due to existing obstructions.

**GENERAL**

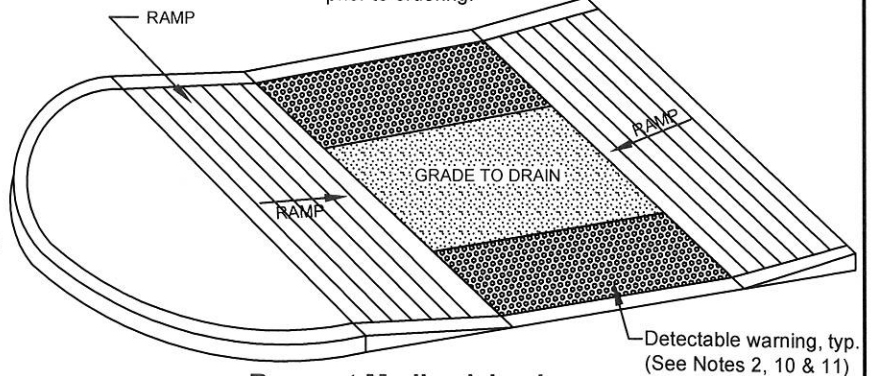
1. The dimensions and slopes presented in the details are the minimum necessary to comply with the ADA and NYSDOT standards. Any deviation less than the minimum width or greater than the maximum slope from these standards must be documented with the standards being met to the greatest extent practicable and consistent with the most current ADAAG.
2. Curb ramps and blended transitions shall require the use of detectable warning surfaces as per latest ADAAG and NYSDOT standards.

**CURB RAMPS**

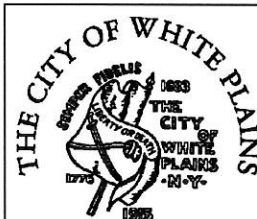
3. The Minimum width for sidewalk Curb Ramps is 5' - 0".
4. The running slope of a Curb Ramp shall be 1 : 20 (5%) Minimum (Preferred) and 1 : 12 (8.33%) Maximum.
5. Where the slope of the roadway exceeds 8.33% the Curb Ramp length is the length necessary to meet the existing sidewalk, except that it need not be more than 15' - 0" in length.
6. The cross slope of Curb Ramps should be as flat as possible, not to exceed 1 : 50 (2%). The cross slope at midblock crossings may be warped to meet street grade.
7. The vertical alignment of a Curb Ramp, excluding the Flares, shall be Planar. Grade breaks shall be flush and perpendicular to the direction of the Ramp Run.
8. Ramp transitions between Walks, Landings, Gutters, or Streets shall be flush and free of abrupt vertical changes (1/4" Max).
9. Where a pedestrian circulation path crosses the Curb Ramp, Flared Sides with a slope of 10% Maximum, measured parallel to the Curb Line, shall be provided.

**DETECTABLE WARNING**

10. Detectable warning surfaces shall be equal to the following:  
New construction\*: Cast-in-Place Composite Tactile, 24"x60" with 2.35" dome spacing.  
Retrofit\*: Surface Mount Composite Tactile, 24"x60" with 2.35" dome spacing.  
 As manufactured by ADA Solutions, Inc., or approved equal.  
 \* For radius curb ramp applications, Radius Section Tactiles shall be used and cut-sheet must be submitted for approval prior to ordering.
11. Detectable warning surface color shall be equal to **Fed. Col. #20109, Brick Red**. Contractor to submit cut-sheet prior to ordering.

**Ramp at Median Islands  
Non-elevated Crossing**

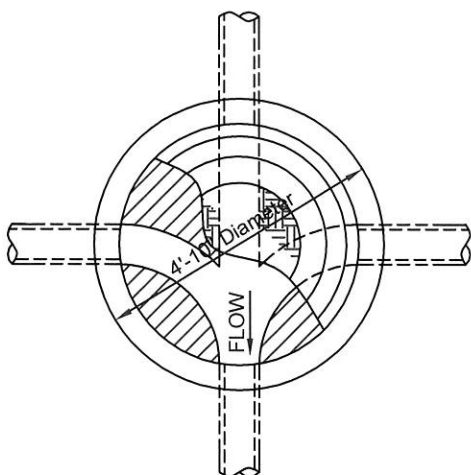
Scale: N.T.S.



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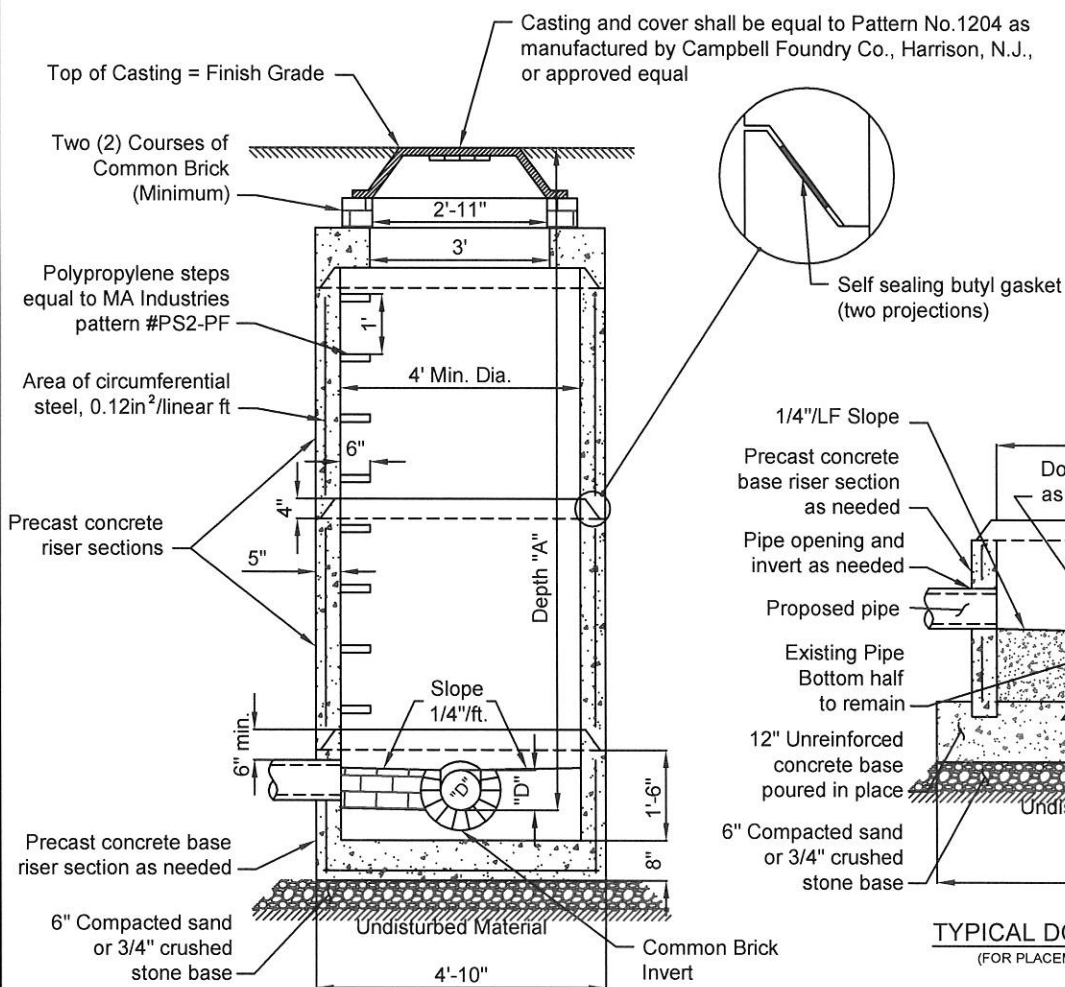
Standard Construction Detail

**Pedestrian Ramp**  
(Sidewalk and Crosswalk-Mall)

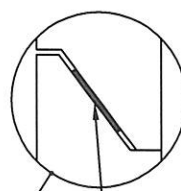


## PLAN

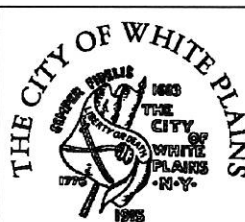
1. Unless otherwise specified Sanitary Sewer manholes shall have letters "SEWER" and Storm Drain manholes shall have letters "DRAIN" cast on the covers.
2. The precast structure shall comply with ASTM specifications C478.
3. When depth "A" is greater than 10'-0", shall be paid for under Item 122.
4. All sanitary sewer manholes are to be constructed with the compression type resilient seal assembly equal to "Omega Concrete Products Inc."
5. It shall be the contractors responsibility to furnish and construct the proper size structure including the necessary openings to accomodate the work, as shown on the plans or ordered by the engineer, at no additional cost to the city.
6. All inlet and outlet connections in Sanitary Sewer Manholes shall be water tight.
7. All necessary patching shall be accomplished with non-shrinking cement mortar grout equal to "Sika-set" as manufactured by the Sika Chemical Corp.
8. Cover for sanitary sewer manholes shall be Campbell, "Flow-Seal" type, with a 3/4" threaded hole located adjacent to the pick hole, 4" from the edge of cover.
9. Detail is applicable for depth "A" less than 13'-0". For "A" greater than or equal to 13'-0", use "Type A" precast concrete deep manhole as shown on standard detail SD41A.



TYPICAL SECTION  
Type "A" Manhole  
(Items 119 & 122)



### TYPICAL DOGHOUSE SECTION (FOR PLACEMENT OVER EXISTING PIPE)

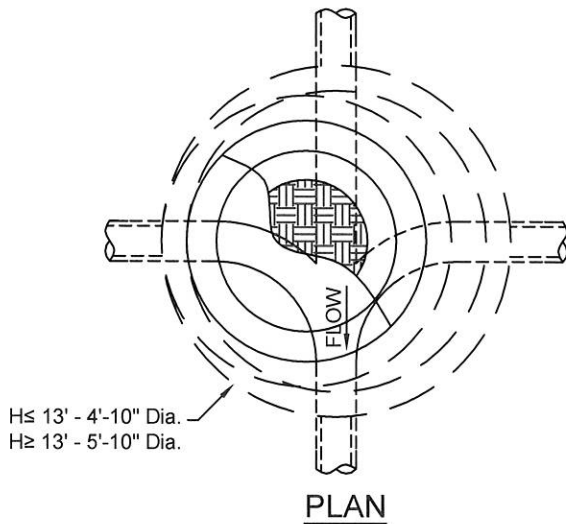


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### Standard Construction Detail

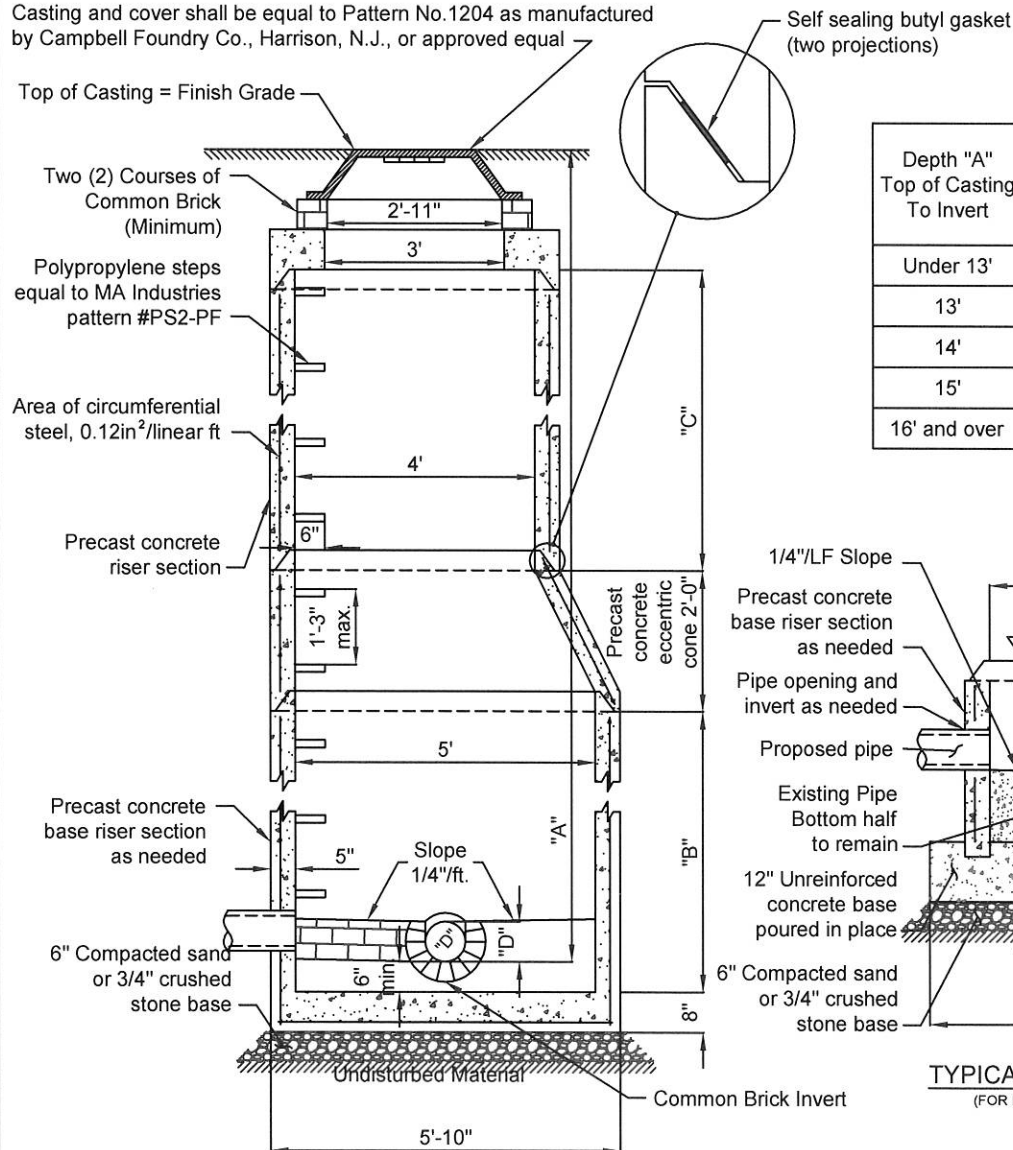
### Type "A" Manhole (Precast Concrete)

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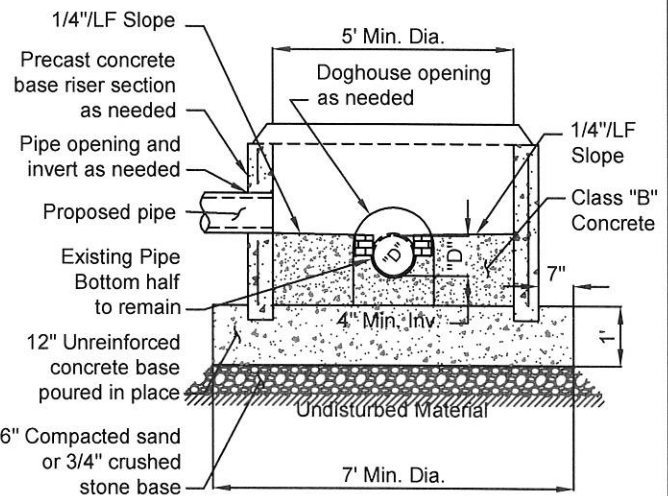


1. Unless otherwise specified Sanitary Sewer manholes shall have letters "SEWER" and Storm Drain manholes shall have letters "DRAIN" cast on the covers.
2. The precast structure shall comply with ASTM specifications C478.
3. When depth "A" is greater than 10'-0", shall be paid for under Item 122.
4. All sanitary sewer manholes are to be constructed with the compression type resilient seal assembly equal to "Hudson Valley Precast Inc."
5. It shall be the contractors responsibility to furnish and construct the proper size structure including the necessary openings to accommodate the work, as shown on the plans or ordered by the engineer, at no additional cost to the city.
6. All inlet and outlet connections in Sanitary Sewer Manholes shall be water tight.
7. All necessary patching shall be accomplished with non-shrinking cement mortar grout equal to "Sika-set" as manufactured by the Sika Chemical Corp.
8. Cover for sanitary sewer manholes shall be Campbell, "Flow-Seal" type, with a 3/4" threaded hole located adjacent to the pick hole, 4" from the edge of cover.

Casting and cover shall be equal to Pattern No.1204 as manufactured by Campbell Foundry Co., Harrison, N.J., or approved equal



| Depth "A"<br>Top of Casting<br>To Invert | "B" Straight<br>Wall 5'-0"<br>Diameter | "C" Straight<br>Wall 4'-0"<br>Diameter |
|--|--|--|
| Under 13'                                | 0                                      | As Required                            |
| 13'                                      | 4'                                     | 5'                                     |
| 14'                                      | 5'                                     | 5'                                     |
| 15'                                      | 6'                                     | 5'                                     |
| 16' and over                             | 6'                                     | A-B-4'                                 |



**TYPICAL DOGHOUSE SECTION**  
(FOR PLACEMENT OVER EXISTING PIPE)

**TYPICAL SECTION**  
**Type "A" Manhole**  
(Items 119 & 122)

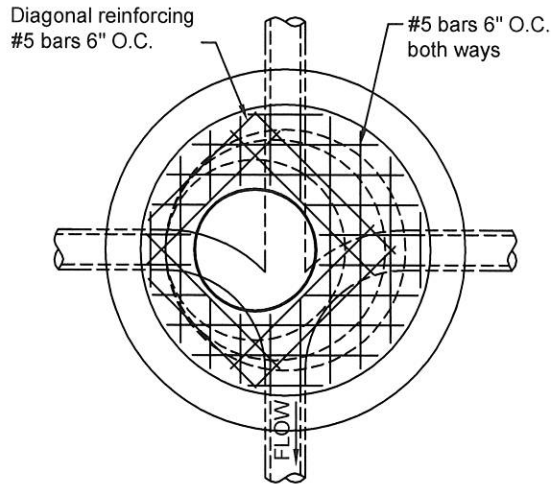


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Bureau of Engineering

Standard Construction Detail

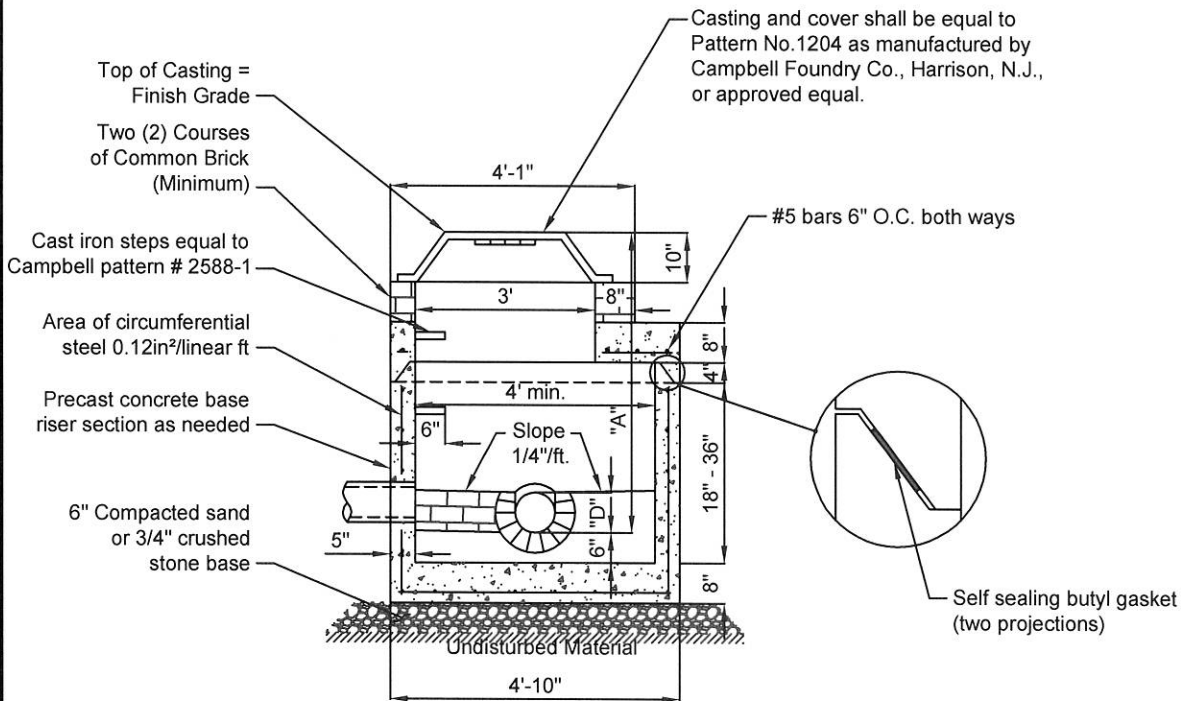
**Type "A" Deep Manhole**  
(Precast Concrete)

## NOTES

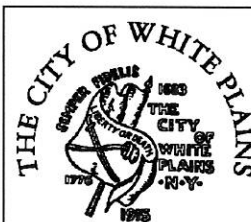


PLAN

1. Type "B" Manhole shall be used where depth "A" is 5'-0" or less.
2. Unless otherwise specified Sanitary Sewer manholes shall have letters "SEWER" and Storm Drain manholes shall have letters "DRAIN" cast on the covers.
3. The precast structure shall comply with ASTM specifications C-478.
4. All sanitary sewer manholes are to be constructed with the compression type resilient seal assembly equal to "Omega Concrete Products Inc."
5. It shall be the contractors responsibility to furnish and construct the proper size structure including the necessary openings to accommodate the work, as shown on the plans or ordered by the engineer, at no additional cost to the city.
6. All inlet and outlet connections in Sanitary Sewer Manholes shall be water tight.
7. All necessary patching shall be accomplished with non-shrinking cement mortar grout equal to "Sika-set" as manufactured by the Sika Chemical Corp.
8. Cover for sanitary sewer manholes shall be Campbell, "Flow-Seal" type, with a 3/4" threaded hole located adjacent to the pick hole, 4" from the edge of cover.
9. For placement over existing pipe see SD-41A for Typical Doghouse Section.



**TYPICAL SECTION**  
**Type "B" Manhole**  
 (Item 120)



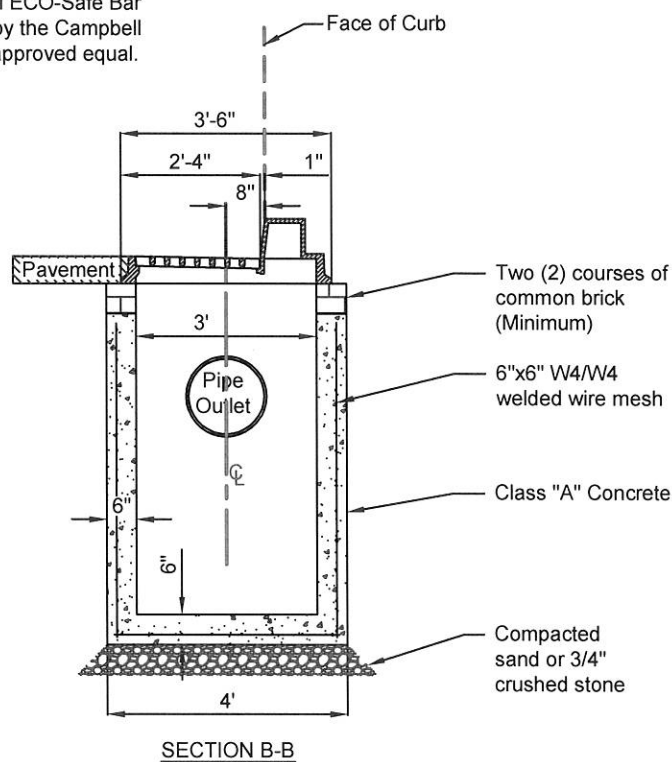
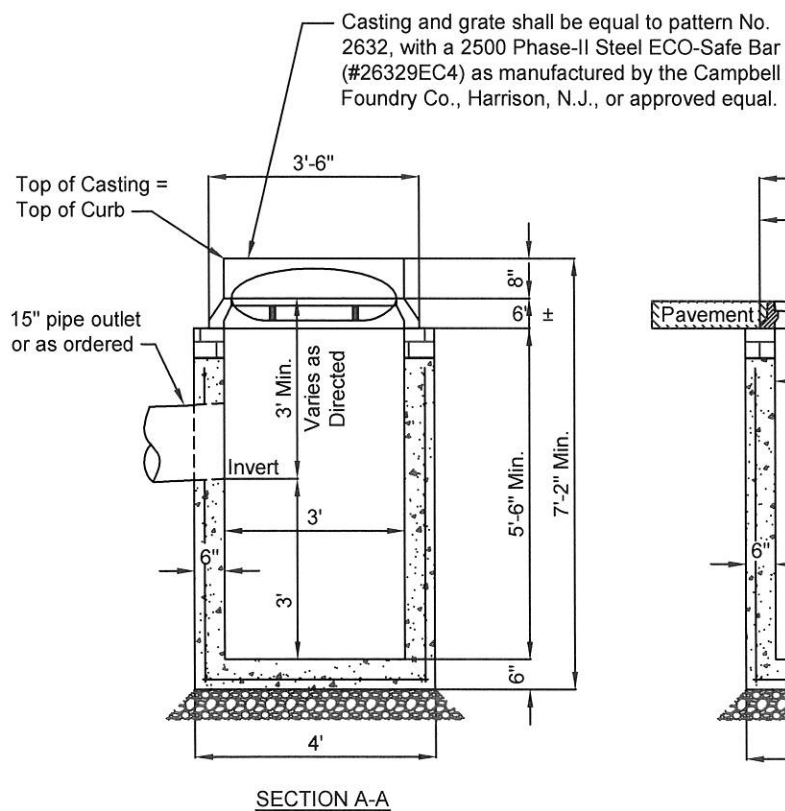
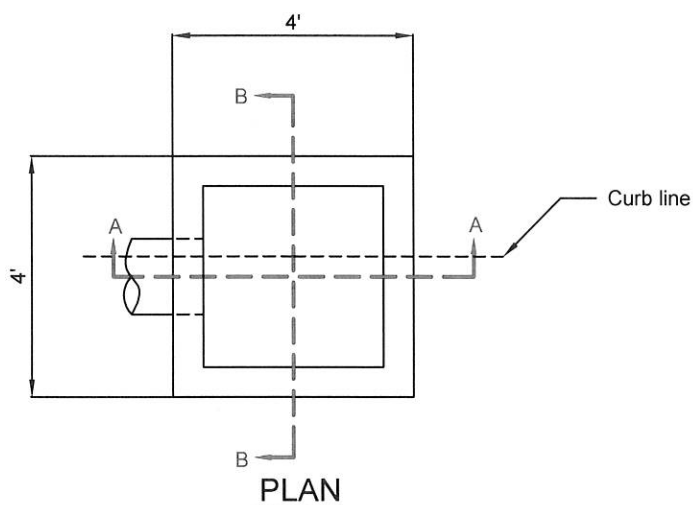
City of White Plains, N.Y.  
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Standard Construction Detail

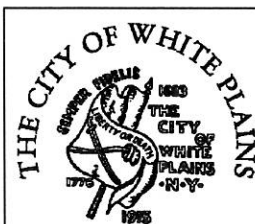
**Type "B" Manhole**  
 (Precast Concrete)

## NOTES

1. The precast concrete structure shall comply with ASTM specifications C478.
2. It shall be the contractors responsibility to furnish and install the proper size structure including the necessary openings to accomodate the work, as shown on the plans or ordered by the engineer, at no additional cost to the city.
3. All necessary patching shall be accomplished with non-shrinking cement mortar grout equal to "Sika-set" as manufactured by the Sika Chemical Corp.
4. The minimum compressive strength of the concrete shall be 4000 PSI.
5. Reinforcing will be a 6"x6" 4 guage welded wire mesh, as per ASTM A-185.



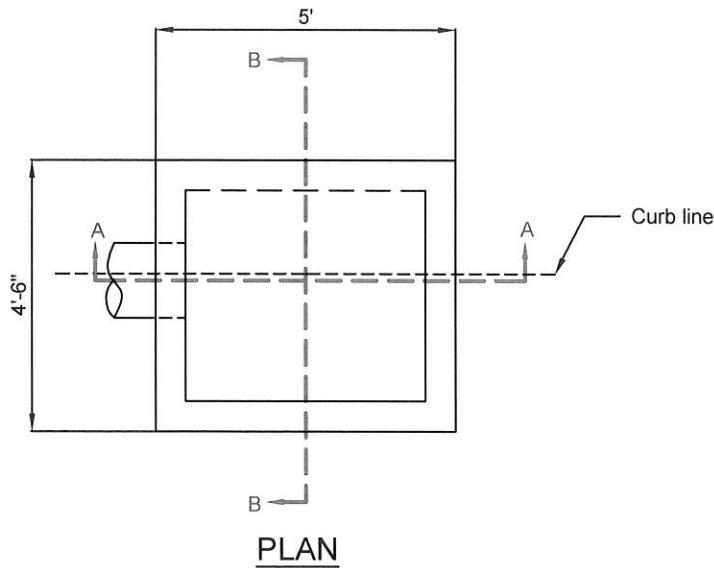
**Type "A" Catch Basin**  
(Item 125)



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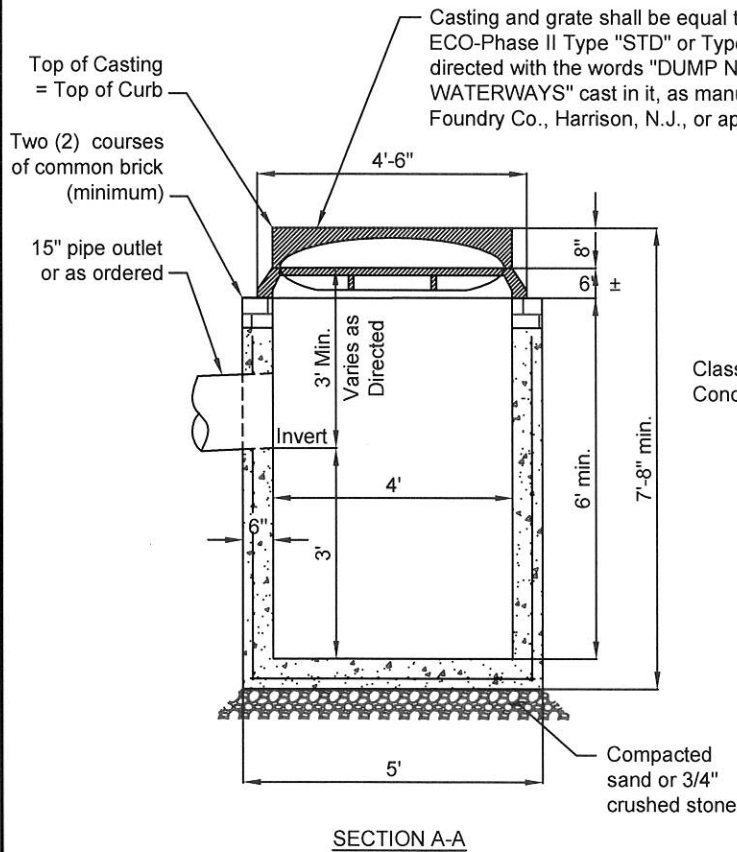
Standard Construction Detail  
**Type "A" Catch Basin**  
(Precast Concrete)



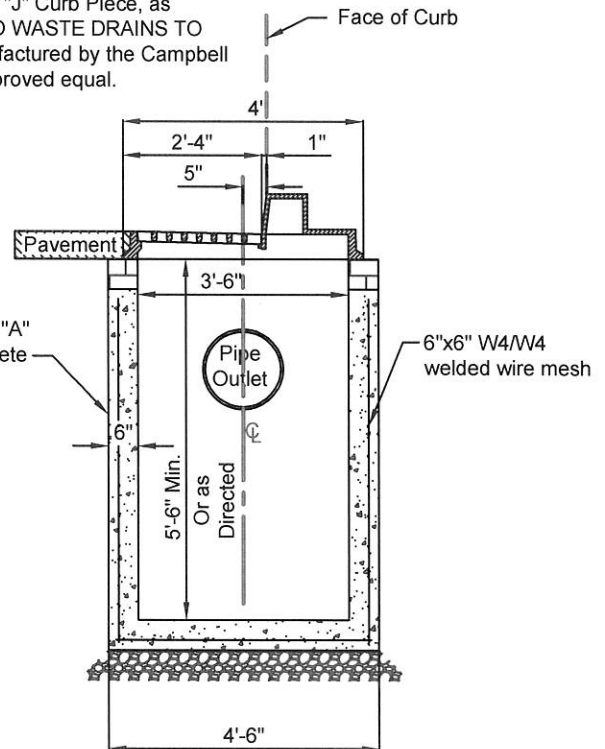


## NOTES

1. The precast concrete structure shall comply with ASTM specifications C478.
2. It shall be the contractors responsibility to furnish and install the proper size structure including the necessary openings to accommodate the work, as shown on the plans or ordered by the engineer, at no additional cost to the city.
3. All necessary patching shall be accomplished with non-shrinking cement mortar grout equal to "Sika-set" as manufactured by the Sika Chemical Corp.
4. The minimum compressive strength of the concrete shall be 4000 PSI.
5. Reinforcing will be a 6"x6" 4 guage welded wire mesh, as per ASTM A-185.

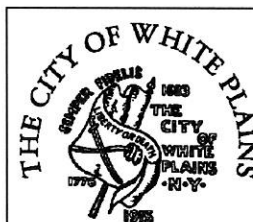


SECTION A-A



SECTION B-B

**Type "B" Catch Basin**  
(Item 126)

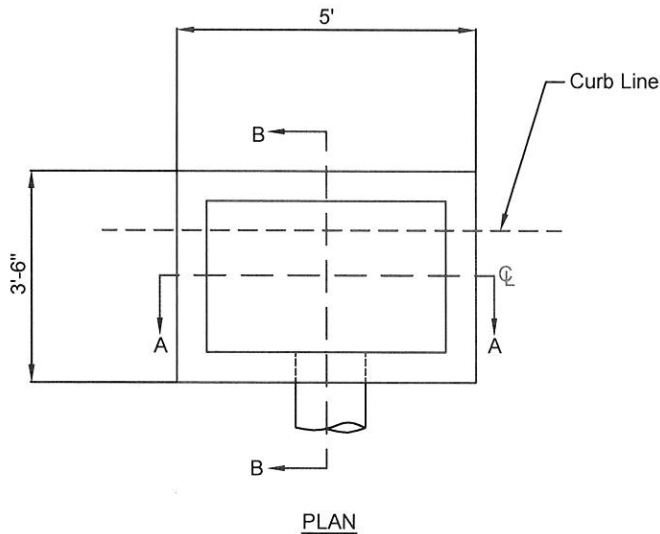


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Standard Construction Detail

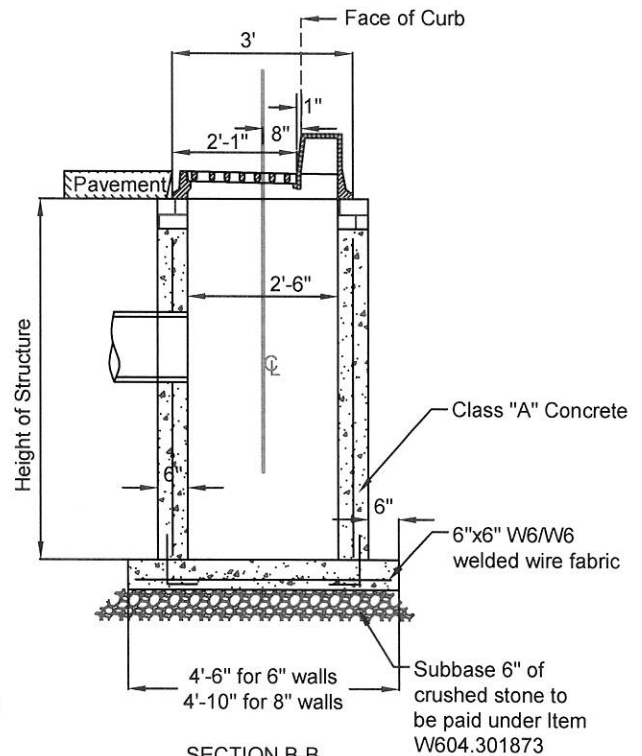
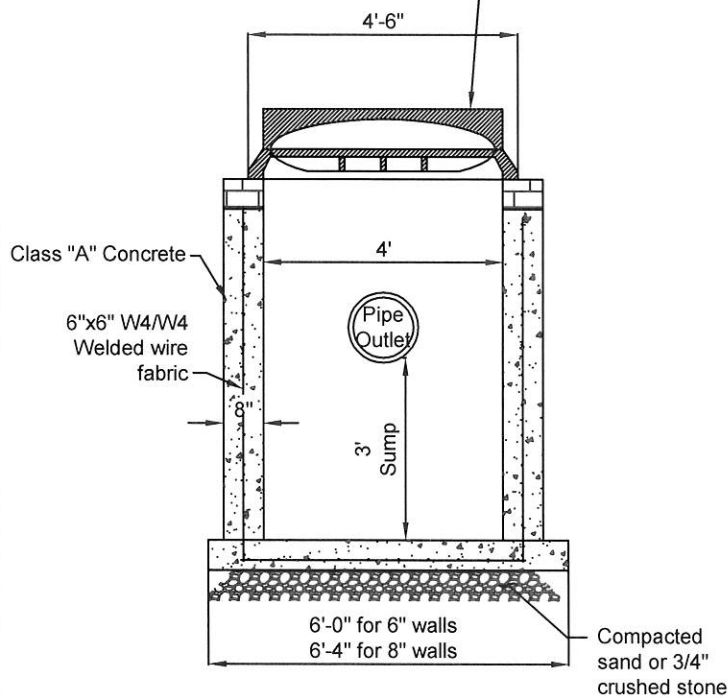
**Type "B" Catch Basin**  
(Precast Concrete)



**NOTES**

1. The precast concrete structure shall comply with ASTM specifications C478.
2. It shall be the contractors responsibility to furnish and install the proper size structure including the necessary openings to accommodate the work, as shown on the plans or ordered by the engineer, at no additional cost to the city.
3. All necessary patching shall be accomplished with non-shrinking cement mortar grout equal to "Sika-set" as manufactured by the Sika Chemical Corp.
4. The minimum compressive strength of the concrete shall be 4000 PSI.
5. Reinforcing will be a 6" x 6" 4 guage welded wire mesh, as per ASTM A-185.
6. Wall Thickness: 8" common brick, 8" concrete brick 6" poured concrete or precast concrete sections.
7. Outside of common brick or concrete block to be plastered with 1/2" coat of cement mortar.

Casting and grate shall be equal to pattern No. 2617, with ECO-Phase II Type "STD" or Type "J" Curb Piece, as directed, with the words "DUMP NO WASTE DRAINS TO WATERWAYS" cast in it, as manufactured by the Campbell Foundry Co., Harrison, N.J., or approved equal



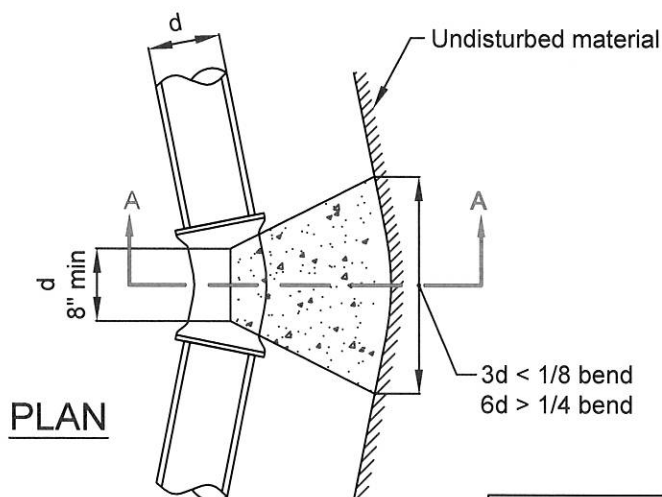
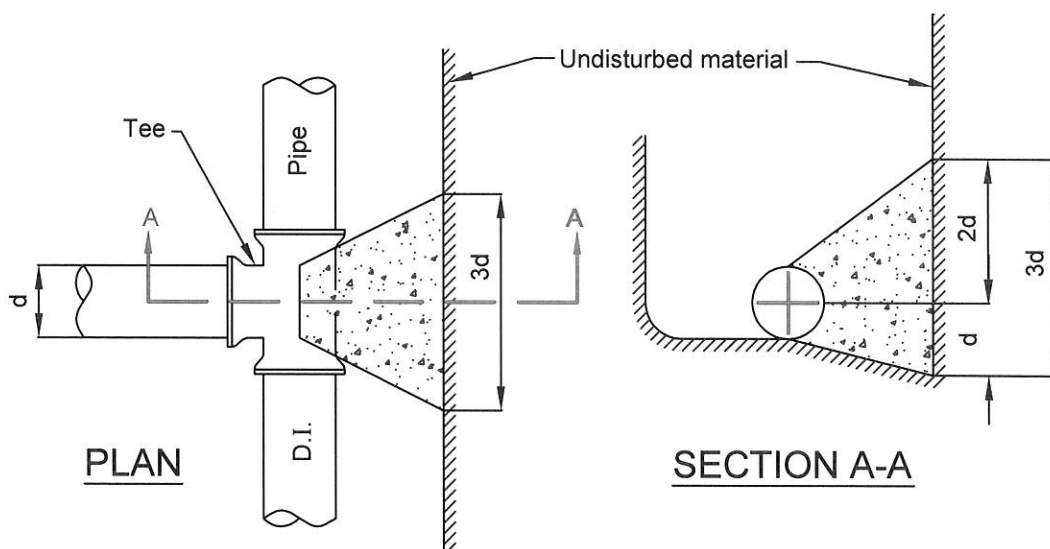
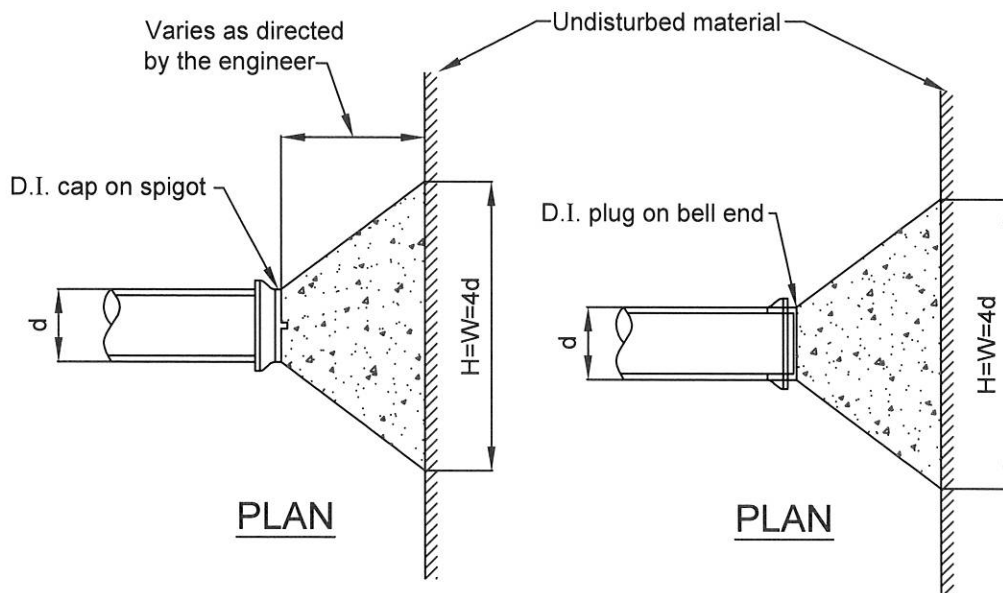
**Modified**  
**Type "B" Catch Basin**  
(Item 126)



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Standard Construction Detail

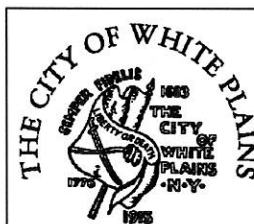
**Modified**  
**Type "B" Catch Basin**  
(Precast Concrete)

NOTES

1. Rodding required per details SD-46 and as specified.
2. Concrete to be placed so as not to interfere with rods, clamps, and bolts.

d = external diameter

Concrete Thrust Blocks  
(Item 21)



City of White Plains, N.Y.  
Bureau of Engineering

Standard Construction Detail

**Concrete Thrust  
Blocks**

| Harnessing Schedule |            |         |     |     |          |
|---------------------|------------|---------|-----|-----|----------|
| Pipe Diameter       | Deflection |         |     |     | Dead End |
|                     | 11-1/4°    | 22-1/2° | 45° | 90° |          |
| 4" and 6"           | 10'        | 10'     | 10' | 14' | 10'      |
| 8"                  | 10'        | 10'     | 10' | 14' | 11'      |
| 10"                 | 10'        | 10'     | 10' | 15' | 12'      |
| 12"                 | 10'        | 10'     | 11' | 18' | 13'      |
| 14"                 | 10'        | 10'     | 13' | 21' | 16'      |
| 16"                 | 10'        | 10'     | 15' | 24' | 19'      |

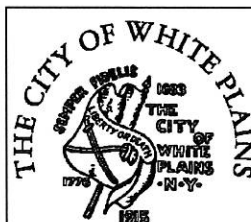
**NOTES:**

- The distances shown are the lineal feet of pipe to be rodded on each side of the fitting or lineal feet of pipe rodded back from a plugged dead end.
- The limits shown above may be increased where specifically shown on the plans or details.

| Tie Rod Size  |              |               |
|---------------|--------------|---------------|
| Pipe Diameter | Rod Diameter | Bolt Diameter |
| 4"            | 3/4"         | 5/8"          |
| 6"            | 3/4"         | 5/8"          |
| 8"            | 3/4"         | 5/8"          |
| 10"           | 7/8"         | 3/4"          |
| 12"           | 1"           | 7/8"          |
| 14"           | 1 1/8"       | 1"            |
| 16"           | 1 1/8"       | 1"            |

| Clamp Size         |              |
|--------------------|--------------|
| D.I. Pipe Diameter | Clamp        |
| 4" and 6"          | 1/2"x 2"     |
| 8" and 10"         | 5/8"x 2 1/2" |
| 14"                | 3/4"x 4"     |
| 16"                | 3/4"x 4"     |

| Anchorage    |              |                   |       |       |       |        |        |
|--------------|--------------|-------------------|-------|-------|-------|--------|--------|
| Bend         |              | Pipe Diameter (d) |       |       |       |        |        |
|              |              | 6"                | 8"    | 10"   | 12"   | 14"    | 16"    |
| 45° bend     | A            | 2'-6"             | 3'-0" | 3'-6" | 4'-0" | 4'-6"  | 5'-0"  |
|              | B            | 2'-6"             | 3'-0" | 3'-6" | 4'-0" | 4'-6"  | 5'-0"  |
|              | C            | 3'-6"             | 4'-0" | 4'-6" | 5'-0" | 5'-6"  | 6'-0"  |
|              | D            | 1'-0"             | 1'-6" | 2'-0" | 2'-6" | 3'-0"  | 3'-6"  |
|              | Rod Diameter | 3/4"              | 3/4"  | 7/8"  | 1"    | 1 1/8" | 1 1/8" |
|              |              |                   |       |       |       |        |        |
| 22-1/2° bend | A            | 2'-0"             | 2'-6" | 3'-0" | 3'-6" | 4'-0"  | 4'-6"  |
|              | B            | 2'-0"             | 2'-6" | 3'-0" | 3'-6" | 4'-0"  | 4'-6"  |
|              | C            | 2'-6"             | 3'-0" | 3'-6" | 3'-6" | 4'-0"  | 4'-6"  |
|              | D            | 1'-0"             | 1'-0" | 1'-6" | 2'-0" | 2'-6"  | 3'-0"  |
|              | Rod Diameter | 3/4"              | 3/4"  | 3/4"  | 7/8"  | 1"     | 1"     |
|              |              |                   |       |       |       |        |        |
| 11-1/4° bend | A            | 2'-0"             | 2'-0" | 2'-6" | 2'-6" | 3'-0"  | 3'-6"  |
|              | B            | 1'-6"             | 2'-0" | 2'-6" | 2'-6" | 3'-0"  | 3'-6"  |
|              | C            | 2'-0"             | 2'-6" | 2'-6" | 3'-6" | 4'-0"  | 4'-6"  |
|              | D            | 1'-0"             | 1'-0" | 1'-0" | 1'-0" | 1'-0"  | 1'-0"  |
|              | Rod Diameter | 3/4"              | 3/4"  | 3/4"  | 7/8"  | 1"     | 1"     |
|              |              |                   |       |       |       |        |        |



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Standard Construction Detail

Page 1 of 4

**Rodding Detail**

# THRUST RESTRAINT SCHEDULE FOR DUCTILE IRON PIPE

THE DISTANCES SHOWN ARE THE LINEAL FEET OF PIPE TO BE RESTRAINED ON EACH SIDE OF THE FITTING OR THE LINEAL FEET OF PIPE RESTRAINED BACK FROM A PLUGGED DEAD END.

## REQUIRED FIELD CONDITIONS:

A. MAXIMUM WATER TEST PRESSURE OF 150 P.S.I.

B. MINIMUM PIPE COVER OF 3'-6".

\* RESTRAINED LENGTH VALUES FOR CONDITIONS OTHER THAN THOSE LISTED ABOVE ARE NOT VALID. SEPARATE CALCULATIONS SHALL BE PROVIDED.

|  |    | HORIZONTAL BENDS |         |     |     | VERTICAL UP BENDS |         |     |     | VERTICAL DOWN BENDS |         |     |     |
|--|----|------------------|---------|-----|-----|-------------------|---------|-----|-----|---------------------|---------|-----|-----|
|  |    | 11-1/4"          | 22-1/2" | 45° | 90° | 11-1/4"           | 22-1/2" | 45° | 90° | 11-1/4"             | 22-1/2" | 45° | 90° |
| * REQUIRED RESTRAINED LENGTH FOR EACH SIDE OF BEND, (ft) |    |                  |         |     |     |                   |         |     |     |                     |         |     |     |
| FITTING DIAMETER (in)                                    | 6  | 3                | 6       | 12  | 28  | 3                 | 6       | 12  | 28  | 7                   | 14      | 30  | 72  |
|  | 8  | 4                | 7       | 15  | 36  | 4                 | 7       | 15  | 36  | 9                   | 18      | 38  | 92  |
|  | 10 | 4                | 9       | 18  | 44  | 4                 | 9       | 18  | 44  | 11                  | 22      | 46  | 112 |
|  | 12 | 5                | 10      | 21  | 51  | 5                 | 10      | 21  | 51  | 13                  | 26      | 54  | 131 |
|  | 14 | 6                | 12      | 24  | 58  | 6                 | 12      | 24  | 58  | 15                  | 30      | 62  | 150 |
|  | 16 | 6                | 13      | 27  | 65  | 6                 | 13      | 27  | 65  | 17                  | 33      | 70  | 168 |
|  | 18 | 7                | 14      | 30  | 71  | 7                 | 14      | 30  | 71  | 18                  | 37      | 77  | 186 |
|  | 20 | 8                | 15      | 32  | 78  | 8                 | 15      | 32  | 78  | 20                  | 40      | 84  | 204 |
|  | 24 | 9                | 18      | 37  | 90  | 9                 | 18      | 37  | 90  | 23                  | 48      | 99  | 240 |
|  | 30 | 11               | 22      | 46  | 111 | 11                | 22      | 46  | 111 | 28                  | 58      | 121 | 292 |
|  | 36 | 13               | 26      | 54  | 131 | 13                | 26      | 54  | 131 | 30                  | 68      | 141 | 341 |
|  | 42 | 15               | 30      | 62  | 150 | 15                | 30      | 62  | 150 | 36                  | 77      | 161 | 388 |
|  | 48 | 17               | 34      | 70  | 170 | 17                | 34      | 70  | 170 | 40                  | 86      | 180 | 434 |

| DEAD ENDS                               |    |     |
|---|----|-----|
| * 1 REQUIRED RESTRAINED<br>LENGTH, (FT) |    |     |
| FITTING DIAMETER (in)                   | 6  | 72  |
|   | 8  | 92  |
|   | 10 | 112 |
|   | 12 | 131 |
|   | 14 | 150 |
|   | 16 | 168 |
|   | 18 | 186 |
|   | 20 | 203 |
|   | 24 | 237 |
|   | 30 | 284 |
|   | 36 | 327 |
|   | 42 | 367 |
|   | 48 | 405 |

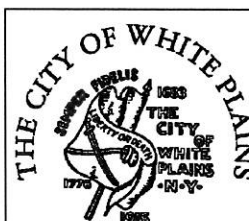
| TEE'S  |         |     |
|--|---------|-----|
| * 2 REQUIRED RESTRAINED<br>BRANCH LENGTH, (FT) |         |     |
| FITTING DIAMETER (in)                          | 6 x 6   | 53  |
|  | 8 x 8   | 74  |
|  | 10 x 10 | 93  |
|  | 12 x 12 | 112 |
|  | 14 x 14 | 131 |
|  | 16 x 16 | 149 |
|  | 18 x 18 | 167 |
|  | 20 x 20 | 183 |
|  | 24 x 24 | 217 |
|  | 30 x 30 | 264 |
|  | 36 x 36 | 307 |
|  | 42 x 42 | 347 |
|  | 48 x 48 | 384 |

| REDUCERS   |         |    |
|--|---------|----|
| * <sup>3</sup> REQUIRED RESTRAINED<br>LENGTH, (FT) |         |    |
| FITTING DIAMETER (in)                              | 8 x 6   | 39 |
|  | 10 x 8  | 38 |
|  | 12 x 10 | 38 |
|  | 14 x 12 | 38 |
|  | 16 x 14 | 38 |
|  | 18 x 16 | 38 |
|  | 20 x 18 | 38 |
|  | 24 x 20 | 71 |
|  | 30 x 24 | 99 |
|  | 36 x 30 | 99 |
|  | 42 x 36 | 95 |
|  | 48 x 42 | 94 |
| 54 x 48  | 98      |    |

<sup>1</sup>. LENGTH OF PIPE TO BE RESTRAINED BACK FROM A PLUGGED DEAD END.

<sup>2</sup>. 12-FT MINIMUM TOTAL LENGTH REQUIRED BETWEEN FIRST JOINTS ON EITHER SIDE OF "TEE" ON THE RUN.

<sup>3</sup>. REQUIRED RESTRAINED LENGTH FOR LARGER DIAMETER PIPE.

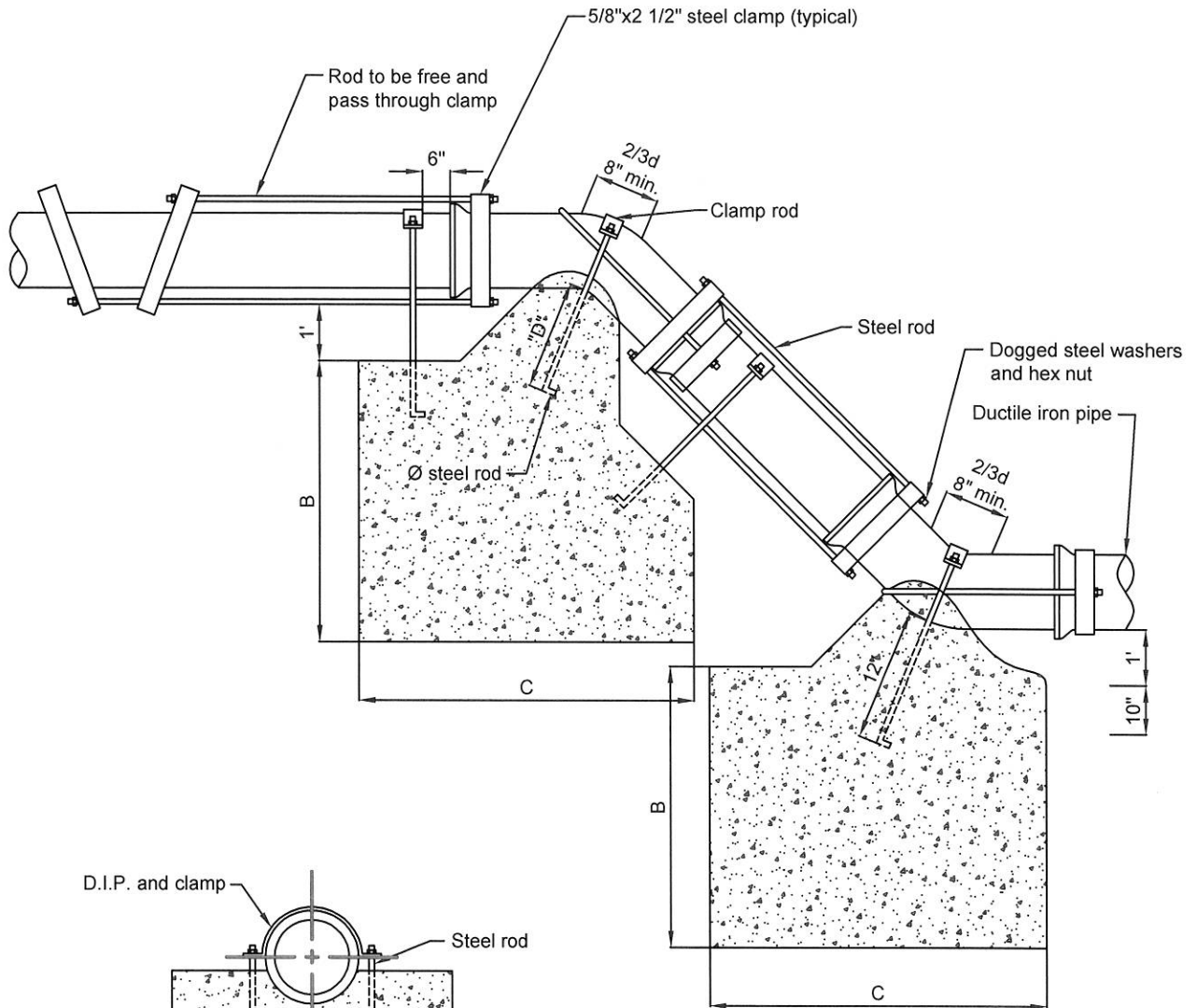


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Standard Construction Detail

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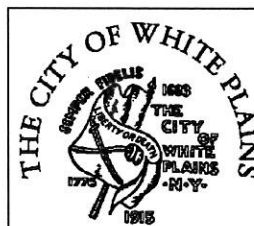
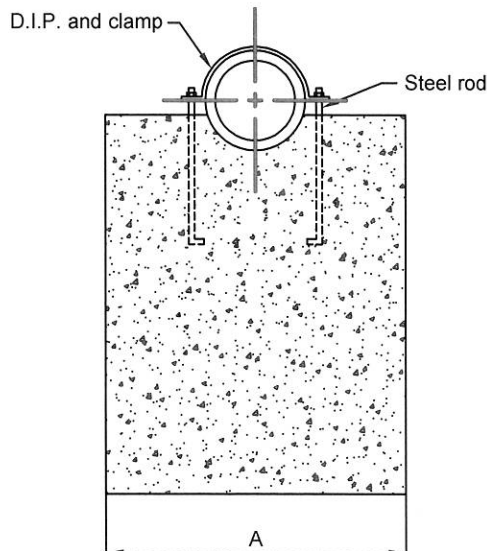
Rodding Detail



### Buttresses and Deflection Harnessing

#### NOTE

1. All concrete will be Class "B".

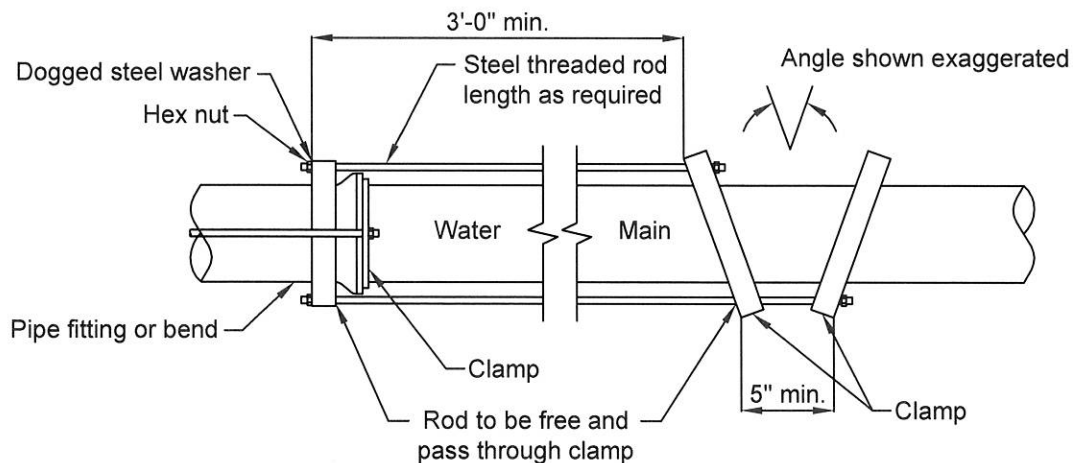


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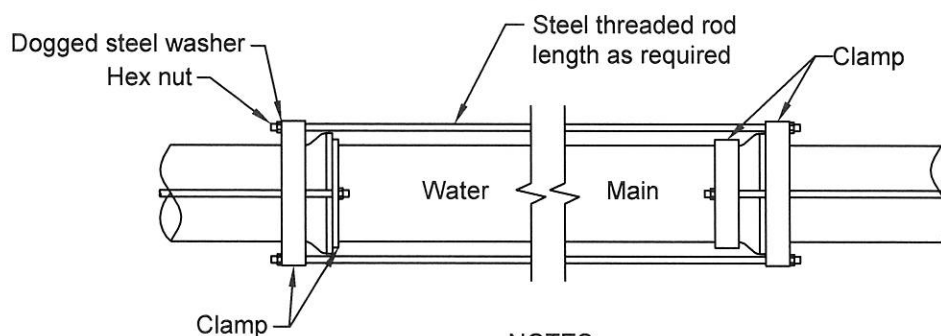
Standard Construction Detail

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**Rodding Detail**



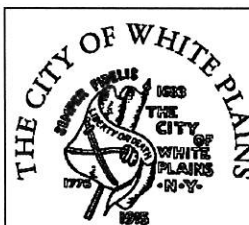
Double Clamp Detail



NOTES

1. To be used for all pipe under 12' long.
2. Also preferred method for all lengths

Full Length Clamp Detail



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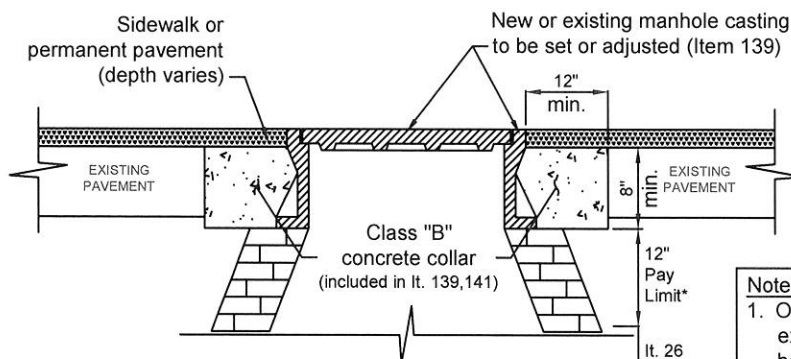
Standard Construction Detail

Page 4 of 4

**Rodding Detail**

Revised: 5-9-07





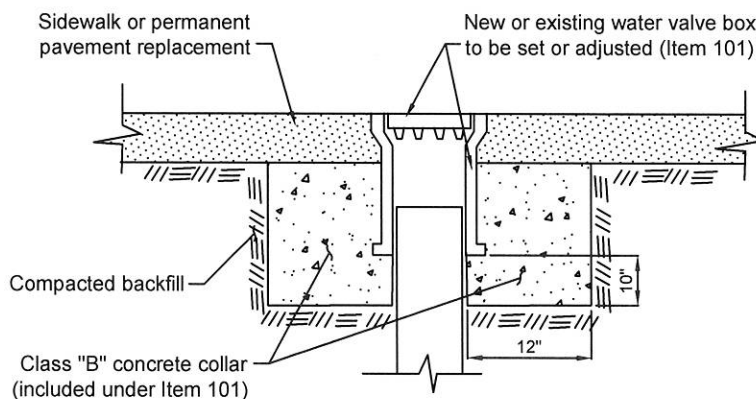
**Adjust New or Existing  
Manhole and Catch Basin  
(Item 139, 140, 141, 142)**

Scale: N.T.S.

**Notes:**

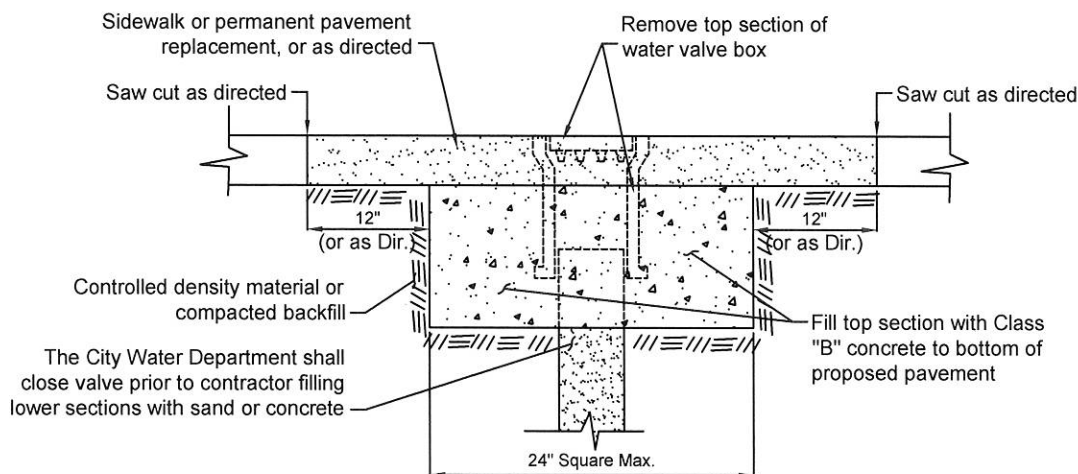
1. Operation of adjusting new or existing catch basin casting shall be performed in a similar manner. (It. 140, 142)

\*Common Brick



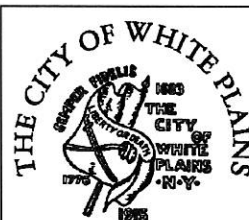
**Set or Adjust New or Existing  
Water Valve Boxes (Item 101)**

Scale: N.T.S.



**Abandon Existing Water Valve Boxes  
(Item 166 or as specified)**

Scale: N.T.S.



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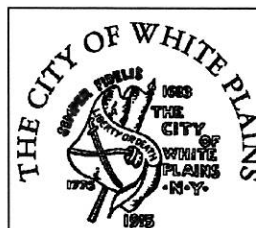
Standard Construction Detail

**Set, Adjust or Abandon  
Castings and Water Valve Boxes**

## **TYPICAL SOIL EROSION & SEDIMENT CONTROL DETAILS**

### **GENERAL NOTES**

1. Contractor shall be responsible for compliance with all soil erosion and sediment control practices.
2. All work shall be performed in accordance with the approved Storm Water Pollution Prevention Plan (SWPPP) if applicable, and/or with the soil erosion and sediment control requirements specified by the NYSDEC *Standards and Specifications for Erosion and Sediment Control* (latest edition), and City of White Plains Department of Public Works (DPW) standards for erosion and sediment control.
3. In the event of conflict between these specification requirements and pollution control laws, rules, regulations or permit conditions by other federal or state or local government agencies, the more restrictive laws, rules or regulations shall apply.
4. The temporary sediment and erosion control practices are to be installed prior to any soil disturbances, and maintained until permanent protection is established.
5. The temporary control provisions shall be coordinated with the permanent erosion and sediment control features as specified to assure effective and continuous soil erosion and sediment control throughout the construction and post construction period.
6. Soil erosion and sediment control measures shall be inspected and maintained by the Contractor during the life of the project, including winter shutdown, etc. Such inspection and maintenance shall continue until after the permanent stabilization measures are in place and the temporary control measures are ordered to be removed by the Engineer.
7. Timely maintenance of sediment control practices is the responsibility of the Contractor. All practices shall be maintained in good working order at all times. The sediment level in all practices shall be closely monitored and sediment removed promptly when maximum levels are reached or as ordered by the Engineer. All sediment control practices shall be inspected by the end of each work day, prior to every weekend, before and after each rainfall of 0.5" or greater within a 12 hour period, or as directed by the Engineer in order to insure proper operation.
8. Where erosion control materials have been used on final grade that have been permanently seeded, the Contractor shall care for the areas until acceptance of the contract or acceptance of the turf, whichever is later. Where necessary, such care may include, but is not limited to providing warning signs or barricades for protection against traffic. Any surfaces that have settled, become gullied, or otherwise damaged shall be repaired at no additional expense to the City to reestablish the grade and soil conditions that existed prior to placing erosion control materials.
9. Dust control must be provided as directed.
10. The Contractor shall keep the roadways clear of soil and debris and is responsible for any street cleaning necessary during the course of the project.
11. **If inspections by the Engineer or the City's DPW inspector find failure(s) by the Contractor to comply, the entire project will be stopped WITH NO COMPENSATION TO THE CONTRACTOR until all findings have been identified, addressed and completed by the Contractor.**
12. If directed, the Contractor shall provide to the Engineer, weekly copies of a report for his inspection, findings and actions taken.
13. Appropriate soil erosion and sediment control measures to be used are specific to the particular site.

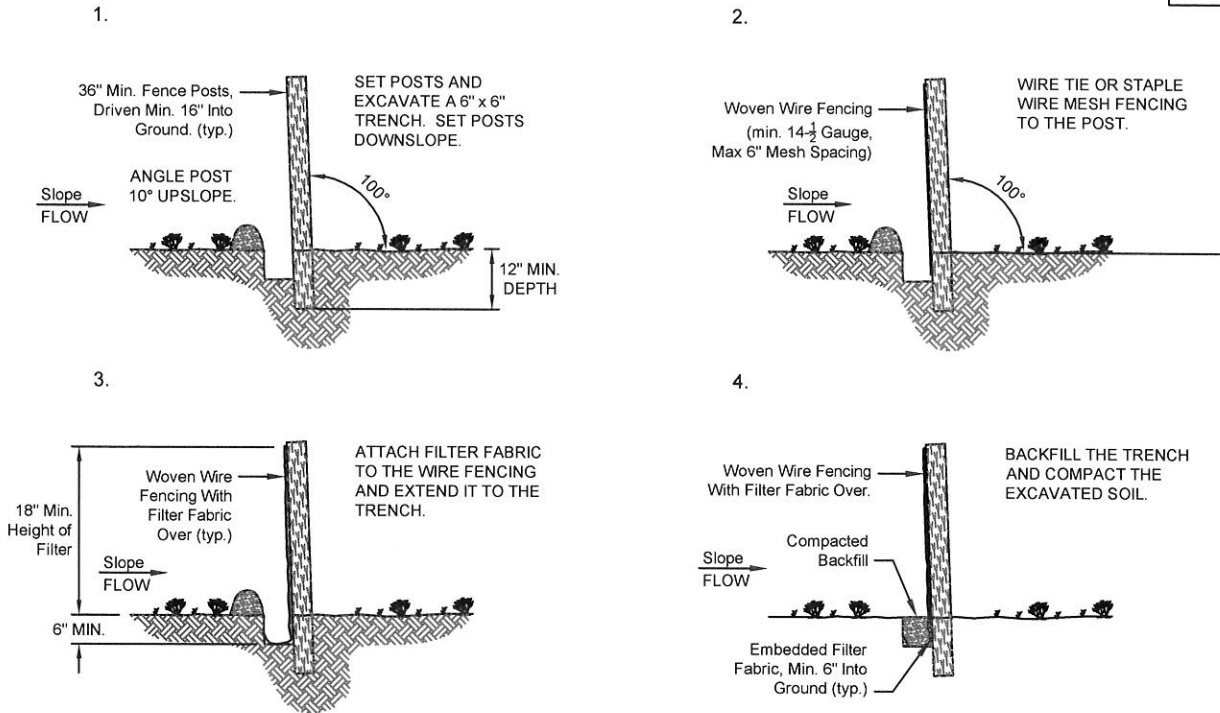


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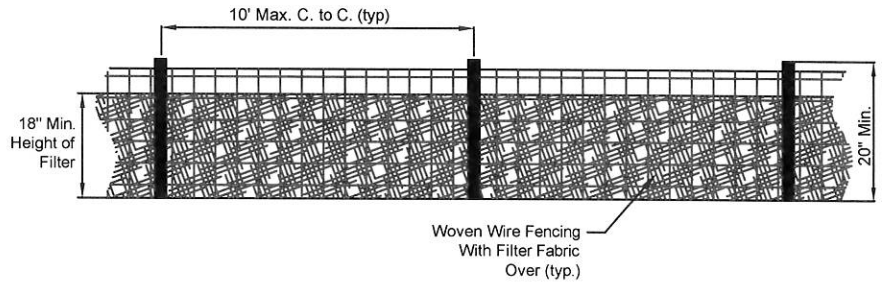
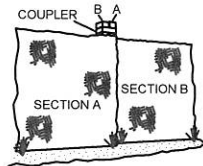
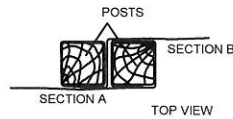
Standard Construction Detail

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**Soil Erosion and  
Sediment Control**



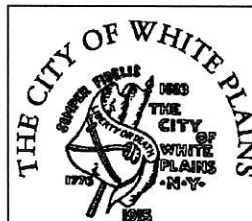
SIDE VIEW

**JOINING SECTIONS OF FENCING****CONSTRUCTION SPECIFICATIONS**

- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
  - FILTER FABRIC TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT THE TOP AND MID SECTION.
  - WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
  - WHEN PREFABRICATED UNITS ARE USED, IT SHALL BE REINFORCED WITH WOVEN WIRE MESH AS DESCRIBED UNDER "FENCE".
  - JOINING OF PREFABRICATED SILT FENCE SHALL BE MADE AS SHOWN ABOVE.
  - PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN OR AS DIRECTED BY THE ENGINEER. REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
  - $\frac{1}{4}$  ACRE PER 100 LF SILT FENCE.
- POSTS:**  
STEEL EITHER "T" OR "U" TYPE, OR 2" HARDWOOD.
- FENCE:**  
WOVEN WIRE, MIN. 14- $\frac{1}{2}$  GA. 6" MAX. MESH OPENING.
- FILTER FABRIC:**  
FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL.
- PREFABRICATED UNIT:**  
MIRAFI ENVIROFENCE, GEOFAB, OR APPROVED EQUAL.

**SILT FENCE DETAIL**

SCALE: N.T.S.



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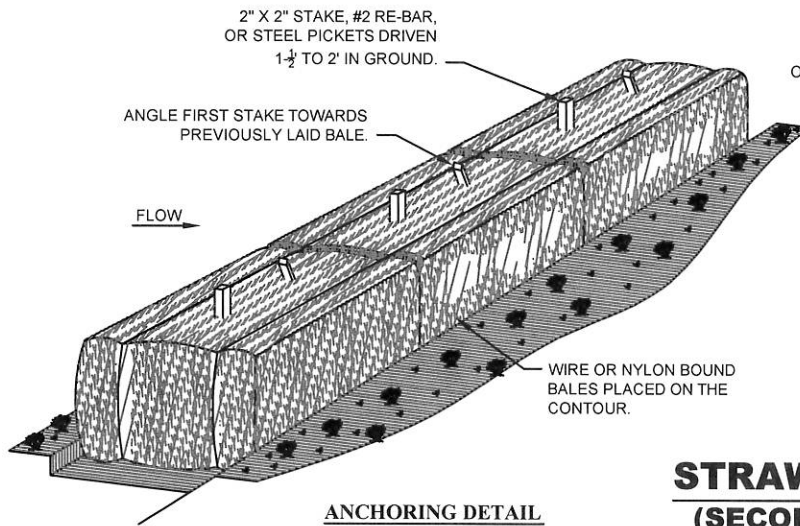
Standard Construction Detail

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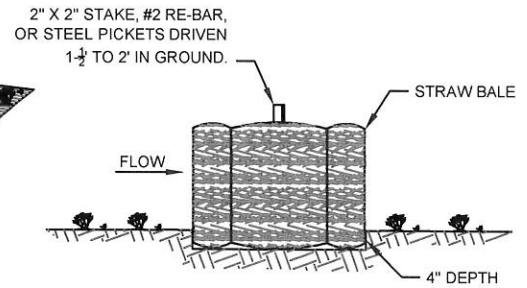
**Soil Erosion and  
Sediment Control**

Revised: 5-16-12

1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF FOUR (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARDS THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN OR AS DIRECTED BY THE ENGINEER. REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.



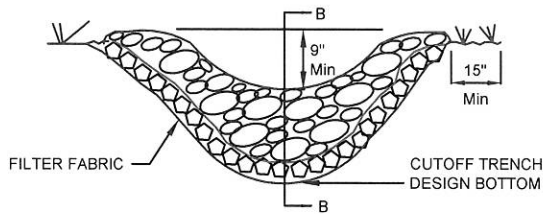
ANCHORING DETAIL



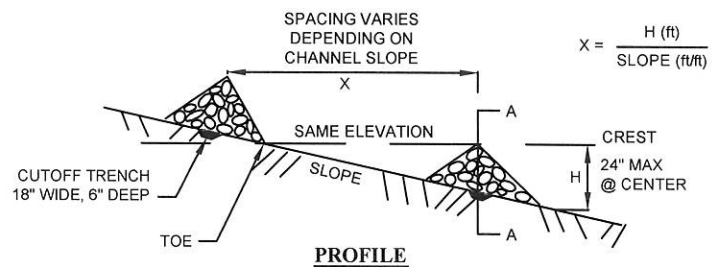
EMBEDDING DETAIL

## STRAW BALE DETAIL (SECONDARY MEASURE)

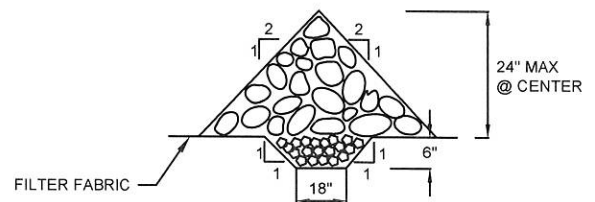
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SECTION A-A



PROFILE



SECTION B-B

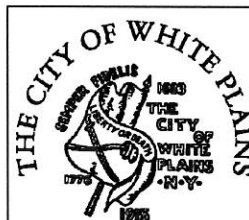
## CONSTRUCTION SPECIFICATIONS

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

MAXIMUM DRAINAGE AREA 2 ACRES.

## CHECK DAM DETAIL

SCALE: N.T.S.

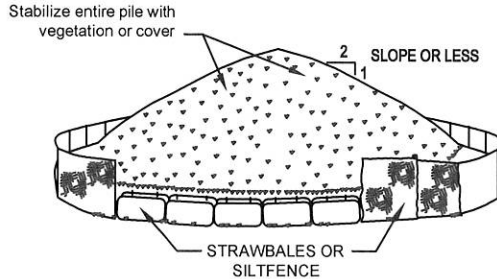


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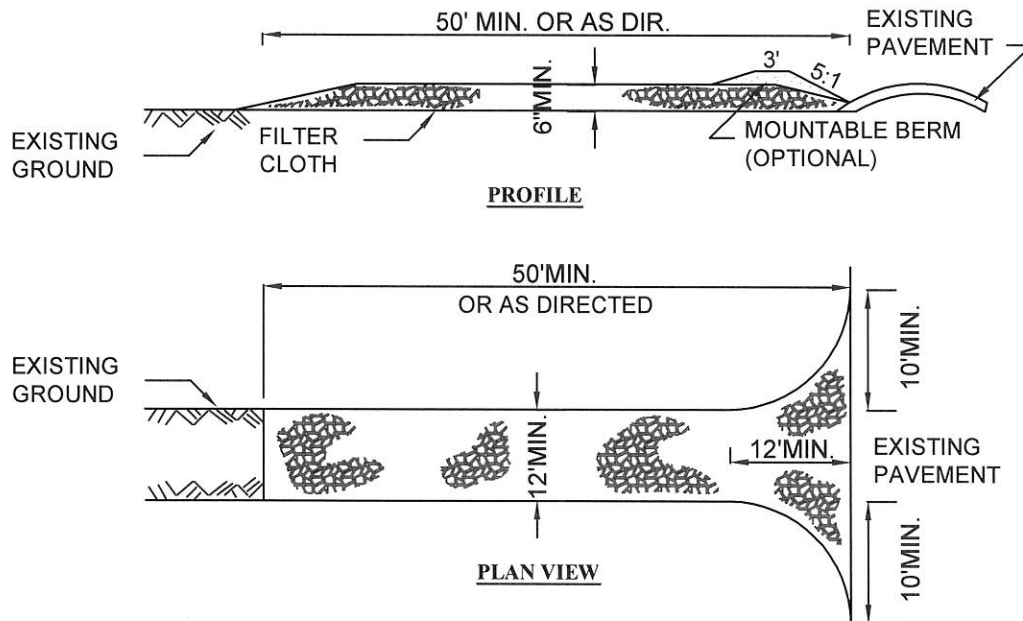
**Soil Erosion and  
Sediment Control**

**INSTALLATION NOTES**

1. TOPSOIL AND OTHER APPROVED NON-SURPLUS MATERIAL STOCKPILES SHALL BE LOCATED ON UNPAVED, LEVEL, DRY GROUND.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 1:2.
3. STOCKPILES SHALL BE COVERED WITH TARPS OR TEMPORARY SEEDING AND BE SURROUNDED BY PROPERLY INSTALLED HAYBALE/STRAWBALE SEDIMENT BARRIERS AND/OR SILT FENCING.
4. WHEN UNABLE TO PLACE STOCKPILE ON UNPAVED SURFACES, CONTRACTOR SHALL, AT THE SOLE DISCRETION OF THE engineer, PLACE STOCKPILE OVER TARP AND COVER AND/OR CONTAIN AS DESCRIBED ABOVE.
5. SEE SPECIFICATIONS FOR INSTALLATION OF SILTFENCE.
6. NO STOCKPILE OF SURPLUS MATERIAL WILL BE PERMITTED.

**SOIL STOCKPIILING DETAIL**

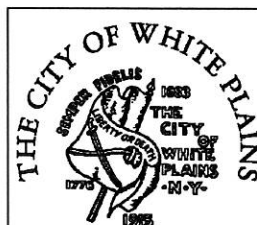
Scale: N.T.S.

**CONSTRUCTION SPECIFICATIONS**

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY), OR AS DIRECTED.
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN OR AS DIRECTED BY THE ENGINEER. REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.

**STABILIZED CONSTRUCTION ENTRANCE DETAIL**

Scale: N.T.S.



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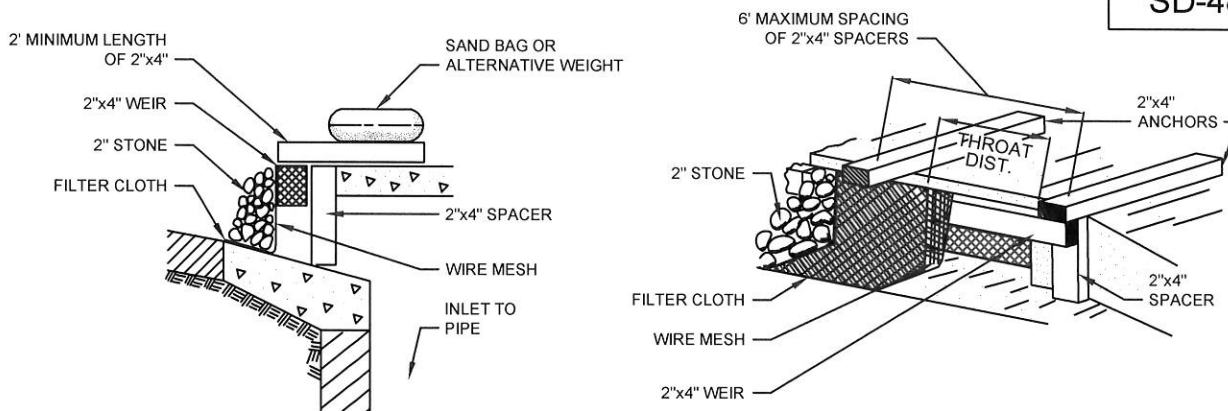
Standard Construction Detail

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**Soil Erosion and  
Sediment Control**

Revised: 5-16-12





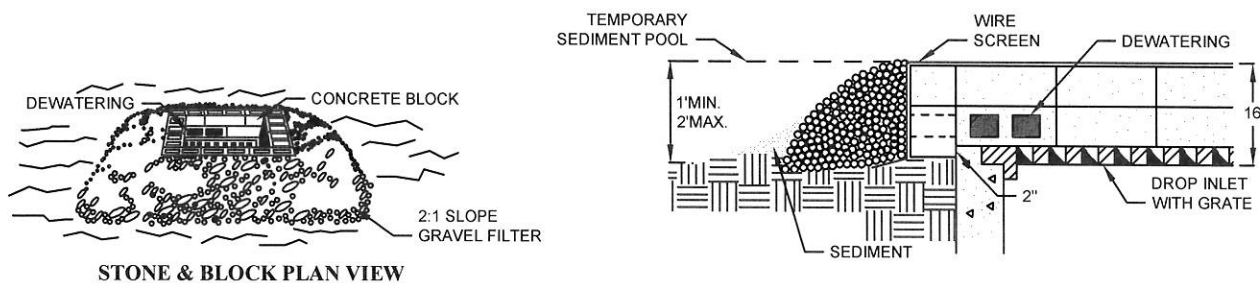
### CONSTRUCTION SPECIFICATIONS

1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85.
2. WOODEN FRAME SHALL BE CONSTRUCTED OF 2" x 4" CONSTRUCTION GRADE LUMBER.
3. WIRE MESH ACROSS THROAT SHALL BE A CONTINUOUS PIECE 30 INCH MINIMUM WIDTH WITH A LENGTH 4 FEET LONGER THAN THE THROAT. IT SHALL BE SHAPED AND SECURELY NAILED TO A 2" x 4" WEIR.
4. THE WEIR SHALL BE SECURELY NAILED TO 2" x 4" SPACERS 9 INCHES LONG SPACED NO MORE THAN 6 FEET APART.
5. THE ASSEMBLY SHALL BE PLACED AGAINST THE INLET AND SECURED BY 2" x 4" ANCHORS 2 FEET LONG EXTENDING ACROSS THE TOP OF THE INLET AND HELD IN PLACE BY SANDBAGS OR ALTERNATE WEIGHTS.
6. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN OR AS DIRECTED BY THE ENGINEER. REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.

MAXIMUM DRAINAGE AREA 1 ACRE

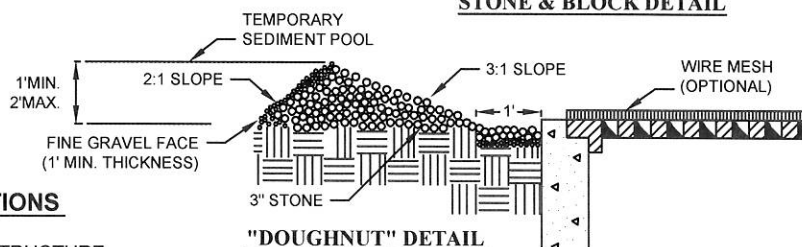
## CURB DROP INLET PROTECTION DETAIL

Scale: N.T.S.



STONE & BLOCK PLAN VIEW

STONE & BLOCK DETAIL



"DOUGHNUT" DETAIL

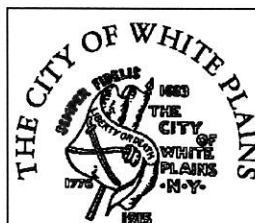
### CONSTRUCTION SPECIFICATIONS

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2-3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS.
5. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN OR AS DIRECTED BY THE ENGINEER. REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.

MAXIMUM DRAINAGE AREA 1 ACRE

## STONE & BLOCK DROP INLET PROTECTION DETAIL

Scale: N.T.S.



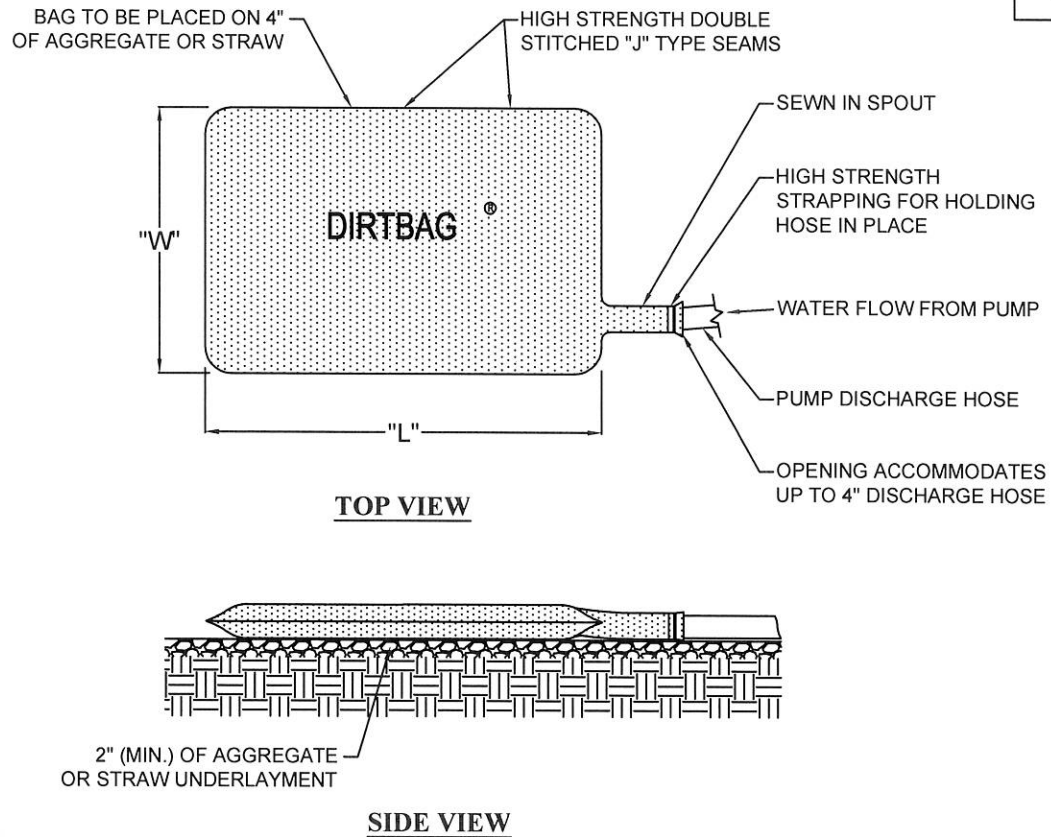
City of White Plains, N.Y.  
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**Soil Erosion and  
Sediment Control**



**MATERIAL SPECIFICATIONS**

1. Sediment Collection Bag shall be equal to DIRTBAG® 55, as marketed by ACF Environmental, Richmond, Virginia (800-448-3636), or approved equal.
2. Sediment Collection Bag shall be a nonwoven bag sewn with high strength thread. The seams shall be high strength, double stitched, "J" type seams.
3. Bags shall have sewn in fill spout large enough to accommodate a 4" discharge hose. Fill spout shall have high strength strapping to hold hose in place and prevent pumped water from escaping without being filtered.
4. The Sediment Collection Bag shall have an average wide width strength of 100 lb/in per ASTM D-4884.
5. The geotextile fabric shall be nonwoven fabric with the following properties\*:

| Properties     | Test Method | Units       | Nonwoven 55 |
|----------------|-------------|-------------|-------------|
| Weight         | ASTM D-3776 | Oz/yd       | 10          |
| Grab Tensile   | ASTM D-4632 | Lbs.        | 250         |
| Puncture       | ASTM D-4833 | Lbs.        | 165         |
| Flow Rate      | ASTM D-4491 | Gal/Min/Ft2 | 70          |
| Permittivity   | ASTM D-4491 | Sec.-1      | 1.3         |
| Mullen Burst   | ASTM D-3786 | Lbs.in2     | 550         |
| UV Resistant   | ASTM D-4355 | %           | 70          |
| AOS % Retained | ASTM D-4751 | %           | 100         |

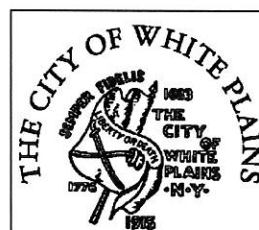
\* All properties are minimum average roll value except the weight of the fabric which is given for information only.

**CONSTRUCTION SPECIFICATIONS**

1. Sediment Collection Bags shall be installed in accordance with the manufacturers instructions, or as directed by the engineer.
2. Sediment Collection Bags left in place as part of a fill or side slope shall be topsoiled and seeded.
3. Sediment Collection Bags shall be removed and replaced under any of the following conditions if not being used as fill or side slope material:
  - When bags are full.
  - When bags have been in place for more than 30 days (removal required due to ultraviolet deterioration).
  - When bags are damaged.
4. All Sediment Collection Bags shall be inspected daily by the contractor.
5. Care shall be taken during removal to minimize loss of entrapped sediment.

## DIRTBAG® GEOTEXTILE SEDIMENT COLLECTION BAG DETAIL

Scale: N.T.S.



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**Soil Erosion and  
Sediment Control**

MATERIAL SPECIFICATIONS

NOTE: THE DRAIN INLET SEDIMENT CONTROL DEVICE SHALL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS.

REGULAR FLOW UNIT

(FOR AREAS OF LOW TO MODERATE PRECIPITATION AND RUN-OFF)

| PROPERTIES              | TEST METHOD | UNITS            |
|-------------------------|-------------|------------------|
| GRAB TENSILE STRENGTH   | ASTM D-4632 | 300 LBS          |
| GRAB TENSILE ELONGATION | ASTM D-4632 | 20 %             |
| PUNCTURE                | ASTM D-4833 | 120 LBS          |
| MULLEN BURST            | ASTM D-3786 | 800 PSI          |
| TRAPEZOID TEAR          | ASTM D-4533 | 120 LBS          |
| UV RESISTANCE           | ASTM D-4355 | 80 %             |
| APPARENT OPENING SIZE   | ASTM D-4751 | 40 US SIEVE      |
| FLOW RATE               | ASTM D-4491 | 40 GAL/MIN/SQ FT |
| PERMITTIVITY            | ASTM D-4491 | 0.55 SEC -1      |

HI-FLOW UNIT

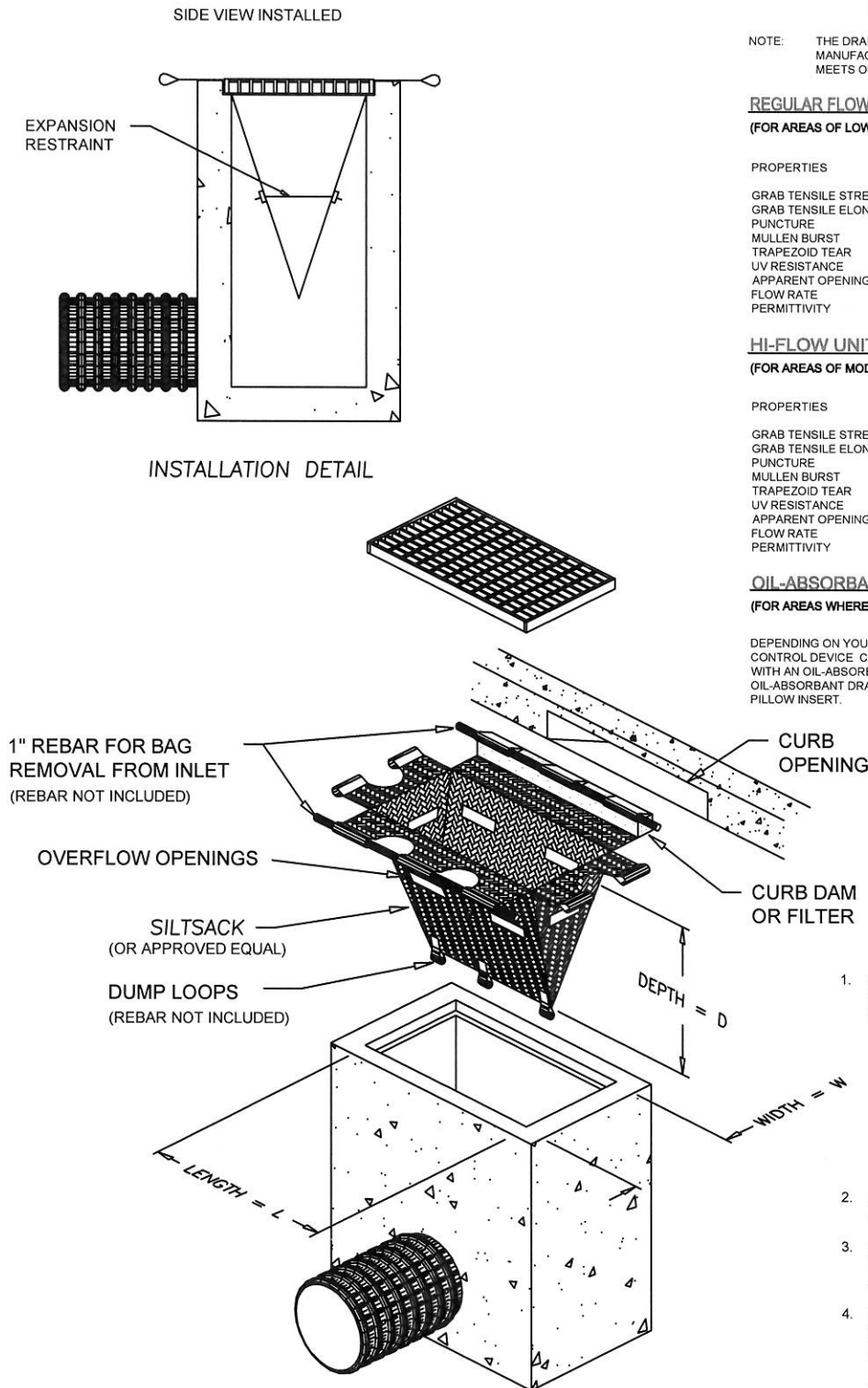
(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF)

| PROPERTIES              | TEST METHOD | UNITS             |
|-------------------------|-------------|-------------------|
| GRAB TENSILE STRENGTH   | ASTM D-4632 | 265 LBS           |
| GRAB TENSILE ELONGATION | ASTM D-4632 | 20 %              |
| PUNCTURE                | ASTM D-4833 | 135 LBS           |
| MULLEN BURST            | ASTM D-3786 | 420 PSI           |
| TRAPEZOID TEAR          | ASTM D-4533 | 45 LBS            |
| UV RESISTANCE           | ASTM D-4355 | 90 %              |
| APPARENT OPENING SIZE   | ASTM D-4751 | 20 US SIEVE       |
| FLOW RATE               | ASTM D-4491 | 200 GAL/MIN/SQ FT |
| PERMITTIVITY            | ASTM D-4491 | 1.5 SEC -1        |

OIL-ABSORBANT UNIT

(FOR AREAS WHERE THERE IS A CONCERN FOR OIL RUN-OFF OR SPILLS)

DEPENDING ON YOUR PARTICULAR APPLICATION, THE DRAIN INLET SEDIMENT CONTROL DEVICE CAN BE MADE FROM EITHER ONE OF THE ABOVE FABRICS WITH AN OIL-ABSORBANT PILLOW INSERT OR, MADE COMPLETELY FROM AN OIL-ABSORBANT DRAIN INLET SEDIMENT CONTROL DEVICE, WITH A WOVEN PILLOW INSERT.

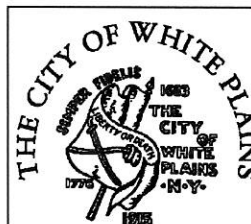
NOTES

- CONTROL DEVICES TO BE USED FOR THE PROTECTION OF DRAIN INLETS WITH CURB OPENINGS SHALL BE EQUAL TO:  
SILTSACK® AS DISTRIBUTED BY ACF ENVIRONMENTAL INC., RICHMOND, VA, (800-448-3636)  
DANDY CURB SACK™ AS MANUFACTURED BY DANDY PRODUCTS INC., WESTERVILLE, OH, (800-591-2284)  
OR APPROVED EQUAL.
- CONTROL DEVICES SHALL BE SIZED ACCORDINGLY TO FIT EACH BASIN.
- CONTROL DEVICES SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.
- DAILY INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED BY THE CONTRACTOR AS REQUIRED, AFTER EACH RAIN, OR AS DIRECTED BY THE ENGINEER. REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.

## SEDIMENT CONTROL DEVICE DETAIL FOR DRAIN INLET WITH CURB OPENING

Scale: N.T.S.

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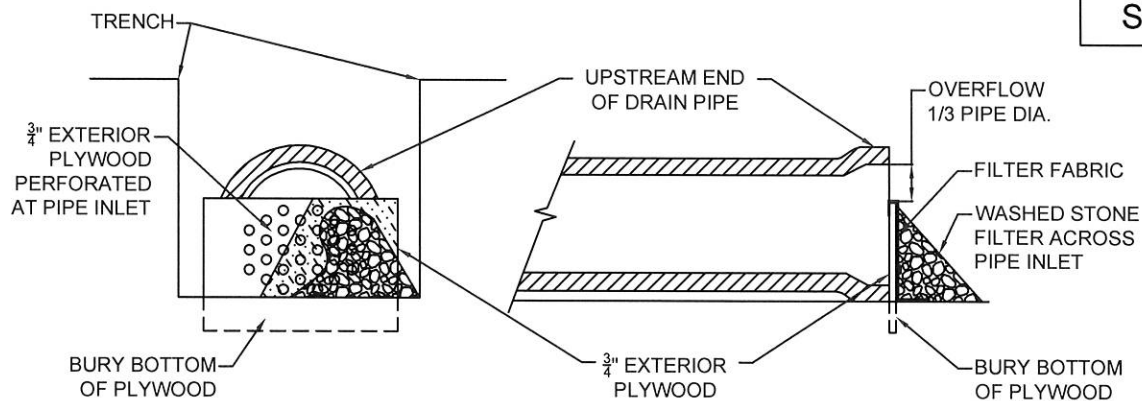
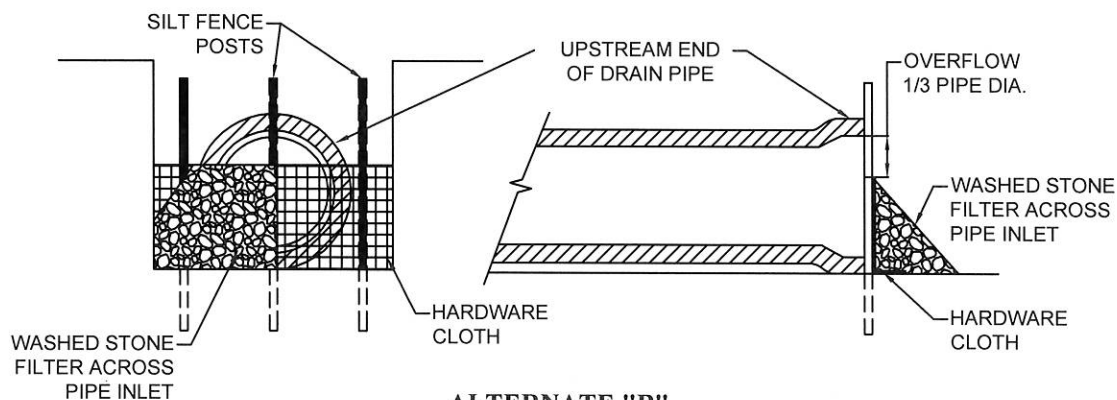
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Bureau of Engineering

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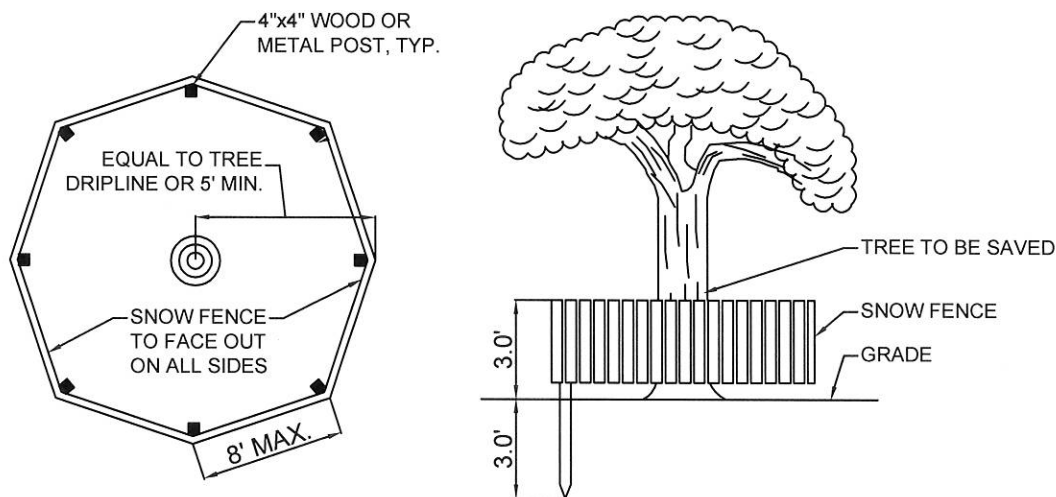
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**Soil Erosion and  
Sediment Control**

Revised: 5-16-12

**ALTERNATE "A"****ALTERNATE "B"****TEMPORARY STORM PIPE PROTECTION DETAIL**

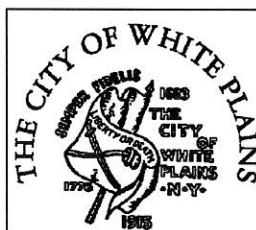
Scale: N.T.S.

**NOTE**

TREE PROTECTION SHALL BE PROVIDED FOR SPECIMEN OF TREES TO BE SAVED WHICH ARE LOCATED IMMEDIATELY ADJACENT TO CONSTRUCTION AREAS OR AS DIRECTED BY THE ENGINEER.

**TREE PROTECTION DETAIL**

Scale: N.T.S.



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**Soil Erosion and  
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